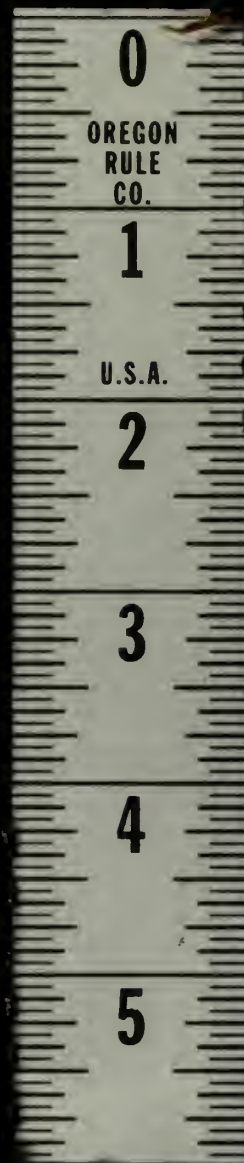


CARL SANDBURG HOME NATIONAL HISTORIC SITE

CULTURAL LANDSCAPE REPORT





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DECEMBER 1993

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Prepared for Carl Sandburg Home National Historic Site
in cooperation with the Cultural Resources Planning Division,
Southeast Regional Office, National Park Service, Department of the Interior

Foreword

We are pleased to participate in the publication of this seminal study of the landscape history of the Carl Sandburg Home, one of our region's most interesting historic sites. This study is remarkable for several reasons, not the least of which is its inception at the behest of the park superintendent, using park funds to address a need keenly felt by the site's managers. It represents one of the earliest such efforts in the Southeast Region, and was prepared under a subagreement to this office's Cooperative Agreement with the School of Environmental Design at the University of Georgia. In addition to producing a document which we hope will be useful in managing the site's important landscape resources, the relationship established between the National Park Service and the author has happily resulted in her employment in the Planning and Compliance Branch of our Regional Office. We are especially grateful to past Superintendent Ken Hulick for his foresight in funding this study, to the author for her hard work and flexibility, to Lucy Lawliss for her substantive contributions to the management recommendations, and to Karen Rehm for her excellent editing and pre-publication efforts. We are delighted to present this study as another in our ongoing series of monographs and reports regarding cultural resources management in the National Park units of the Southeast Region.

Kirk A. Cordell
Chief, Cultural Resources Planning
Southeast Region
National Park Service
September 1993



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Acknowledgements

I would like to express my gratitude to the many people whose contributions made this work possible. I received overwhelming support and assistance from the staff at Carl Sandburg Home National Historic Site. Their efforts enabled me to uncover valuable information from the enormous historical collections there. I especially want to thank former Superintendent Ken Hulick; Chief Interpreter, Warren Weber; Bess Gibbs; Judy Helmich; Johnny Wright; and Muriel Potts for their help, encouragement, and camaraderie.

I am particularly grateful to the members of the Sandburg family--Margaret and Janet Sandburg, Helga Sandburg Crile, and Paula Steichen Polega--for their willingness to share their memories of the Connemara landscape.

Finally, I wish to thank Darrel Morrison, Dean of the School of Environmental Design, University of Georgia, whose support and insight made this project a reality. I also am grateful to Ian Firth for his assistance and for his ability to help me keep this work in perspective.

SANDBURG FAMILY MEMBERS

Carl Sandburg (1878-1967): Poet, biographer, song-writer. Purchased Connemara in 1945.

Lilian Steichen (Paula) Sandburg (1883-1977): Wife of Carl Sandburg. Well-known for her herd of Chikaming Dairy Goats.

Margaret Sandburg (1911-): Daughter of Carl and Paula Sandburg.

Janet Sandburg (1916-): Daughter of Carl and Paula Sandburg.

Helga Sandburg (1918-): Daughter of Carl and Paula Sandburg.

John Carl Steichen (1941-): Grandson of Carl and Paula Sandburg, born to Helga.

Paula Steichen Polega (1943-): Granddaughter of Carl and Paula Sandburg, born to Helga.

"ZINNIA SONATA"

*I have seen zinnias give out
with little songs and begging pardon
for the songs being short.
I have seen zinnias claim their rights
to speak promises saying to beholders,
"Whatever may be your wish, sir or madam,
I promise you shall have it--today, tomorrow,
somewhere over the blue hills and bright valleys,
it shall be yours to keep--whatever you wish--
we so promise--we zinnias God made for promising."*

*I have heard zinnias counseling together:
"Ever the summer is kind to us,
summer belonging to us as we belong to summer.
When God said, 'Let there be summer'
He also said, 'And let there be zinnias
bathed in colors called from sunsets and early stars.'
And God having so spoken
how can we be either proud or humble?
how can we be aught else than quiet blooming zinnias?"*

*Thus having heard the zinnias
I shall go again and again to hear the zinnias.*

--Carl Sandburg, 1953

CHAPTER ONE

INTRODUCTION

This project is a landscape restoration and management study of the Carl Sandburg Home National Historic Site. It addresses the preservation and restoration needs of the historic landscape with particular emphasis on areas highly frequented by visitors to the park. In this study, information gathered from photographic archives and personal interviews will be compared with present day field observation analyses in order to formulate a history of management policies and a basis on which management recommendations can be made.

The study was supported by a cooperative agreement between the National Park Service (NPS) and the School of Environmental Design, University of Georgia, (CA-5000-8-8009) and was conducted for graduate course credit as a thesis project in the School of Environmental Design. The project was supervised by Darrel G. Morrison with comments and suggestions by Ian Firth.

PROJECT BACKGROUND

The Carl Sandburg Home National Historic Site (CARL) was placed on the National Register in 1968 because of its association with a nationally known figure. Carl Sandburg spent the last twenty-two years of his extraordinary literary career amidst the solitude and beauty of Connemara in the southern Appalachians. Poet, historian, biographer, twice winner of the Pulitzer Prize, this great American enjoyed a bucolic setting

complete with animals, woodlands, pastures, ponds, gardens, trails, and distant views.

The site is located in Flat Rock, North Carolina, twenty-six miles south of Asheville, North Carolina, via Interstate 26 and five miles south of Hendersonville, North Carolina, via US 25, see figure 1.1. Christopher G. Memminger, Secretary of the Treasury for the Confederate States of America, acquired the property and built the residence by 1838. He retired there in summers to escape the heat of his Charleston home. In 1888, the estate was sold to Colonel William Gregg, who apparently never occupied the house. By 1900, the property changed hands again. Ellyson Adger Smyth, a wealthy textile businessman, bought the estate and changed the farm's name to Connemara.

In December of 1945, the Sandburgs moved from their home in Harbert, Michigan, to Connemara. In addition to seeking a milder climate and a farm suitable for raising goats, Mrs. Lillian "Paula" Sandburg chose Connemara for its "winding driveway banked with one-hundred foot pine trees and an ivy-covered stone wall" (Steichen 1969, 7). More importantly, the distance between the house and the goat barn would enable her husband to write undisturbed while she could continue raising prize goats and selling milk to the local dairy (Steichen 1969, 7). After Carl Sandburg's death in 1967, Congress designated the estate a National Historic Site. Carl Sandburg Home National Historic Site was established in 1972 and opened to the public in 1974

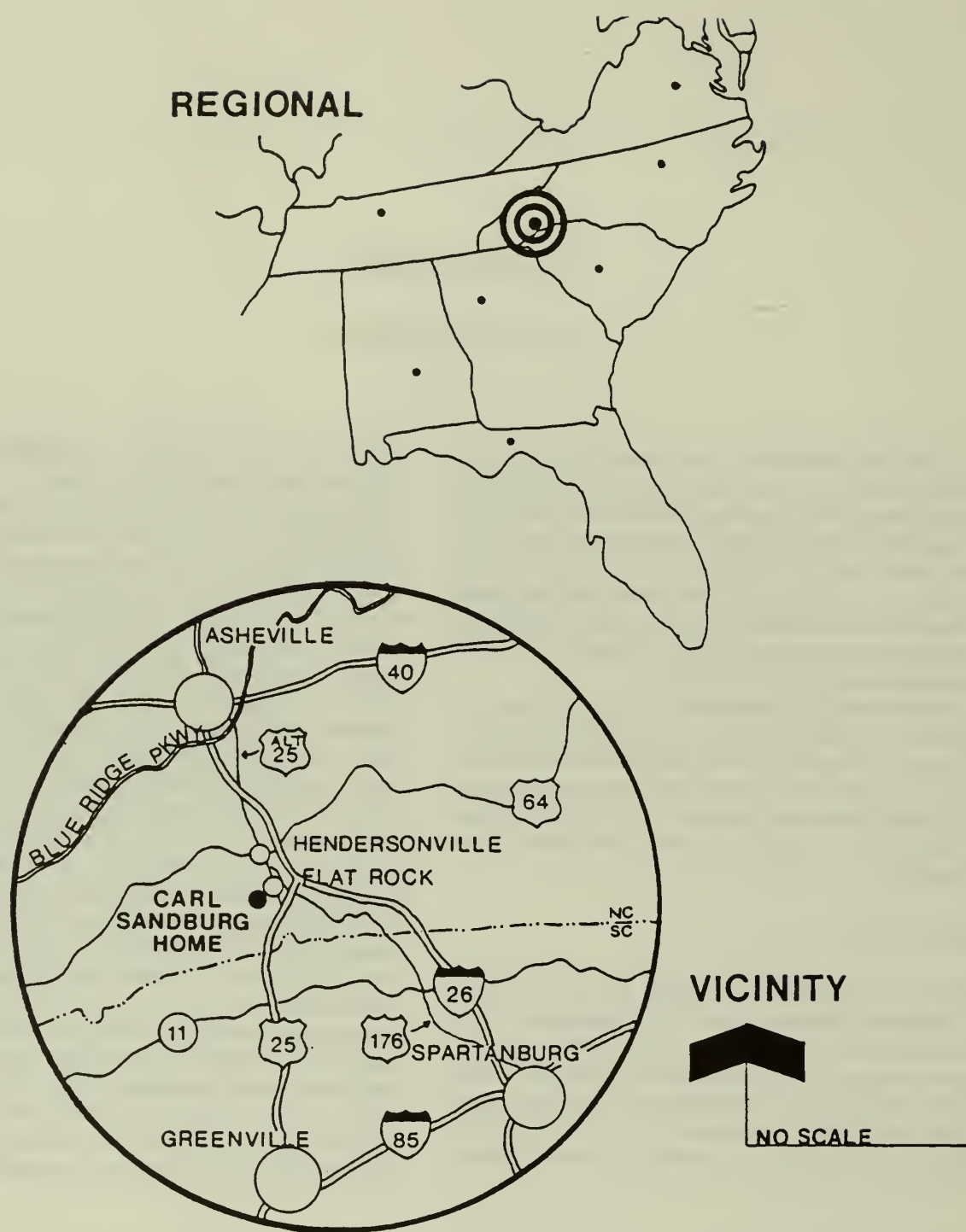


Figure 1.1 Location Map (adapted from *Development Concept Plan for Carl Sandburg National Historic Site*, 1980)

(NPS 1982). Today the National Park Service manages the historic site for approximately 56,000 visitors per year, see figure 1.2 (NPS 1989).

HISTORIC PERIOD

Attempts to restore the present Connemara landscape to its historic period have been based upon available documentation. Because much of this documentation provides information during the later period, it is recommended that the "Late Period," of 1960-67 be designated the historic period.

SITE FEATURES

Carl Sandburg National Historic Site consists of several site features, many of which are experienced by most visitors to the site. Much of the historical documentation concerns the residence area and farm area as emphasized in figure 1.2. Designated the Core Area (see figure 1.3), these site features include the historic entrance and tree-lined drive; the summer garden; the lawn, flower beds, and plantings around the main house; the pens and grassed areas around the Swedish house, the chicken house, and the spring house; the wood shed and water storage area; the tenant house and surrounding area; the spring garden and green house area; the area surrounding the caretaker's house, the goat barn courtyard; and the vegetable garden. Other features unique to Connemara include the rock outcrop behind the house, trails, orchard, pastures, and views, all of which are included in this study.

MANAGEMENT ISSUES

When NPS acquired CARL, little was known of the management history of the farm. Emphasis was given to the preservation of historic structures and the provisions necessary for park visitors. In addition, NPS created a park-like setting at

Connemara by maintaining the landscape with careful mowing, pruning, and raking. The Sandburgs' appreciation of nature, expressed in a relaxed management policy and resulting in a variety of managed and unmanaged landscapes, was not addressed. Thus, Connemara no longer exhibited these historic visual qualities of variety and change.

One of the National Park Service's objectives for CARL is to "preserve and perpetuate the landscape as Carl Sandburg knew it" (NPS 1971, 21). In order to fulfill this goal several topics need to be addressed. They include:

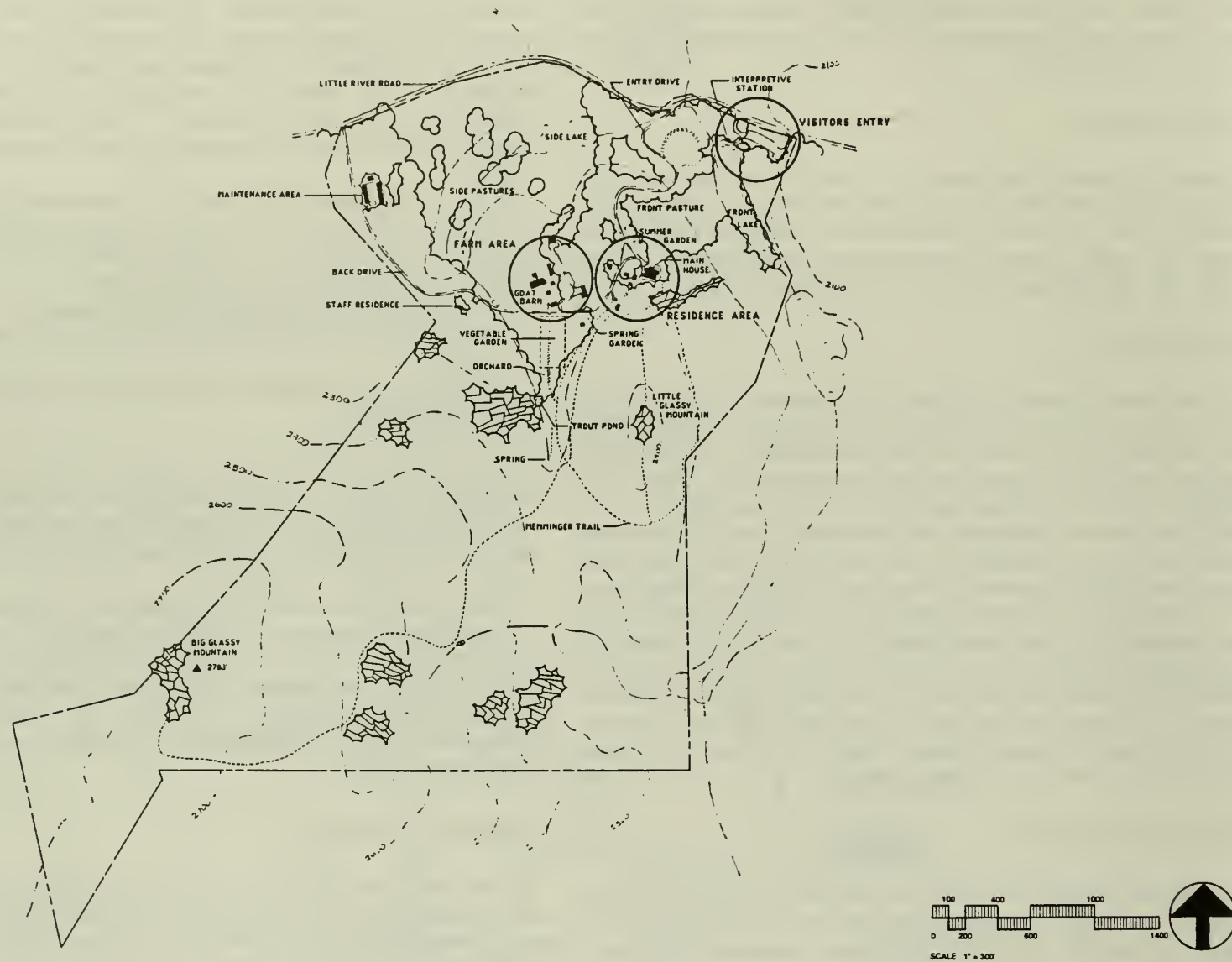
- 1) the Sandburg philosophy towards nature,
- 2) the Sandburg management policies for Connemara, and
- 3) the types of changes occurring at the site during the historic period.

It is, therefore, the objective of this study to determine ways in which the processes of change at Connemara can be restored or preserved. By doing so, visitors to CARL will experience a landscape similar to that which Carl Sandburg knew.

Finally, as the Sandburg landscape was typically untidy and overgrown, restoration of these changes in a manner similar to the Sandburg period may initially cause concern among visitors and community members. The National Park Service should, therefore, address the need for an interpretive program along with the implementation of the management plan.

RESEARCH METHODS

The archives used for this research are located at CARL. The photographic archives were invaluable in determining the changes in the Core Area from the early 1900s to the present date. These include photographs of the Smyth,



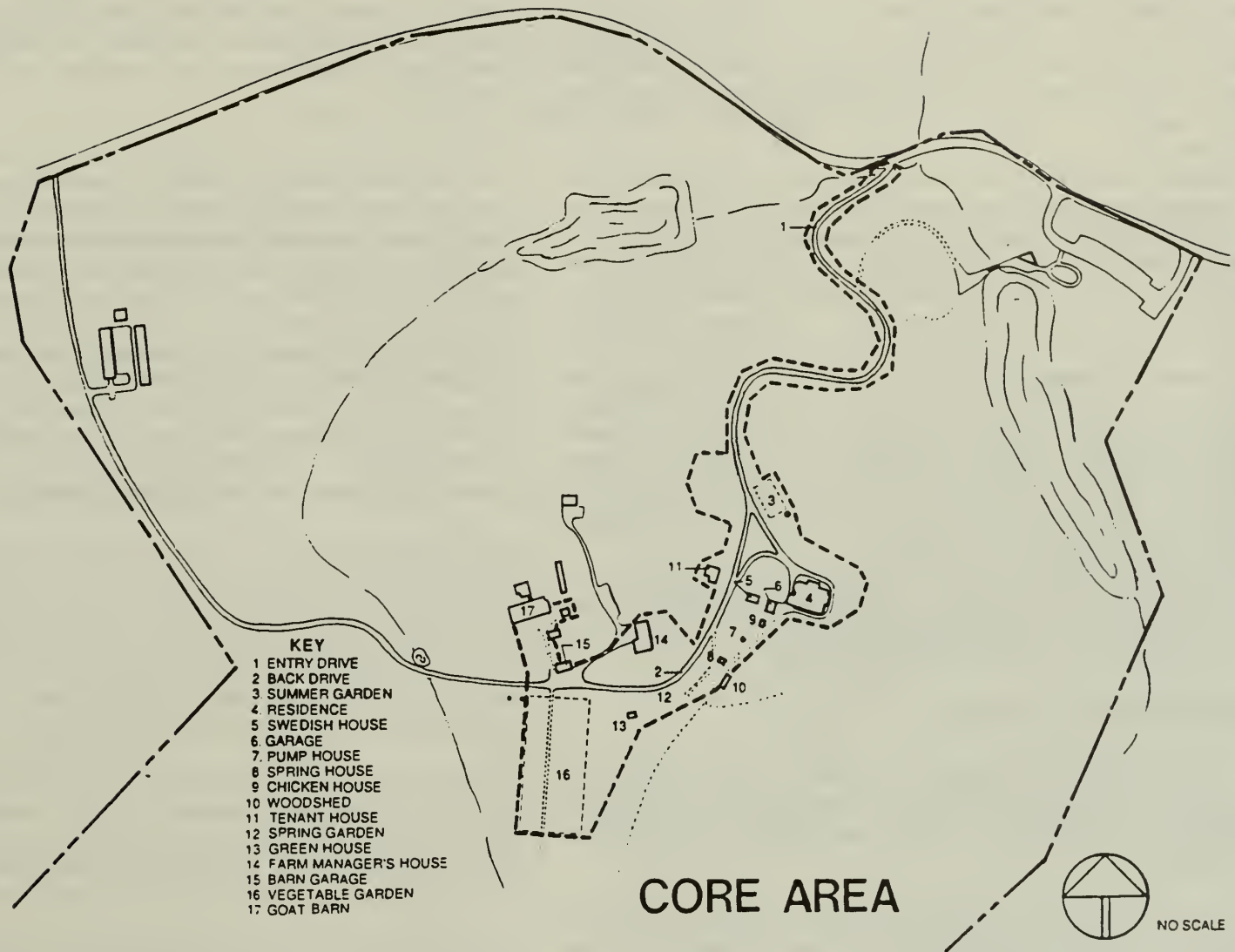


Figure 1.3--Core Area

Sandburg, and NPS periods. Of particular importance were the family albums with photographs of Connemara landscapes, flower beds, and individual species. In the Farm Office at the Main House, seed order forms, seed packets, plant markers with names, check stubs, and old seed catalogs helped determine exact species or types of species typically planted at Connemara.

Valuable information was also gathered through interviews with family members and former and present NPS personnel. Two members of the family provided plant lists and hand drawn planting plans for the summer garden. Several hand drawn plans of plantings and flower beds around the main house were also provided by a family member. Interviews with park personnel provided information on park management policies and physical changes. These interviews in combination with photographs taken by NPS provided the basis by which changes in management methods from the historic period to the present were documented. Field investigations to record current conditions of landscape features and NPS management publications were also used as a basis for understanding present park management policies.

Other sources included: publications by NPS on the Sandburg years at Connemara, local historians' publications on Henderson County and the Sandburg home, and books written by family members about life at Connemara.

ORGANIZATION OF THE STUDY

The organization of this study is based on other studies of management strategies for historic landscapes (Bond and Tiller, 1987; Firth, 1985; Gilbert, 1987; Grese, 1984). It is organized as follows:

1) The pre-Sandburg landscape--the important landscape features of the Memminger, Gregg, and Smyth periods; and the treatment of features during these three periods.

2) The historic conditions of Connemara during the Sandburg years--the Sandburg philosophy and conditions dictating management at the site, the feeling associated with the historic scene, and changes in the Sandburg landscape.

3) Assessment of the integrity of the site as compared with its condition during the historic period--the present NPS management policies; factors leading to the present condition of the Sandburg landscape; and factors having contributed to any loss of integrity (including man-made and natural causes).

4) Examination of the feasibility of a restoration program and various management alternatives.

5) Recommendations for management--general policies, management recommendations by area, and recommendations for interpretive programs.

CHAPTER TWO

THE PRE-SANDBURG LANDSCAPE

When encountered by the Sandburgs in 1945 Connemara had been shaped and managed for over one hundred years. This natural landscape of the western Carolinas underwent changes necessary to meet the needs of each subsequent proprietor. Presented are the contributions of each period of ownership and a brief discussion of management and design philosophies as they were applied to Connemara. A summary of land acquisitions and boundary adjustments is given in figure 2.1.

PRE-SETTLEMENT LANDSCAPE

During the 1700s, the Flat Rock area was primarily Indian hunting grounds. No Cherokee villages are recorded there, and archeological studies of CARL have only revealed several Indian middens (NPS 1977, p. 19). This hunting ground of virgin forests provided rich habitat for such wildlife as elk, buffalo, deer, bear, turkey, and wolves. The area was dominated by oak-hickory climax forests associated with many large rock outcrops.

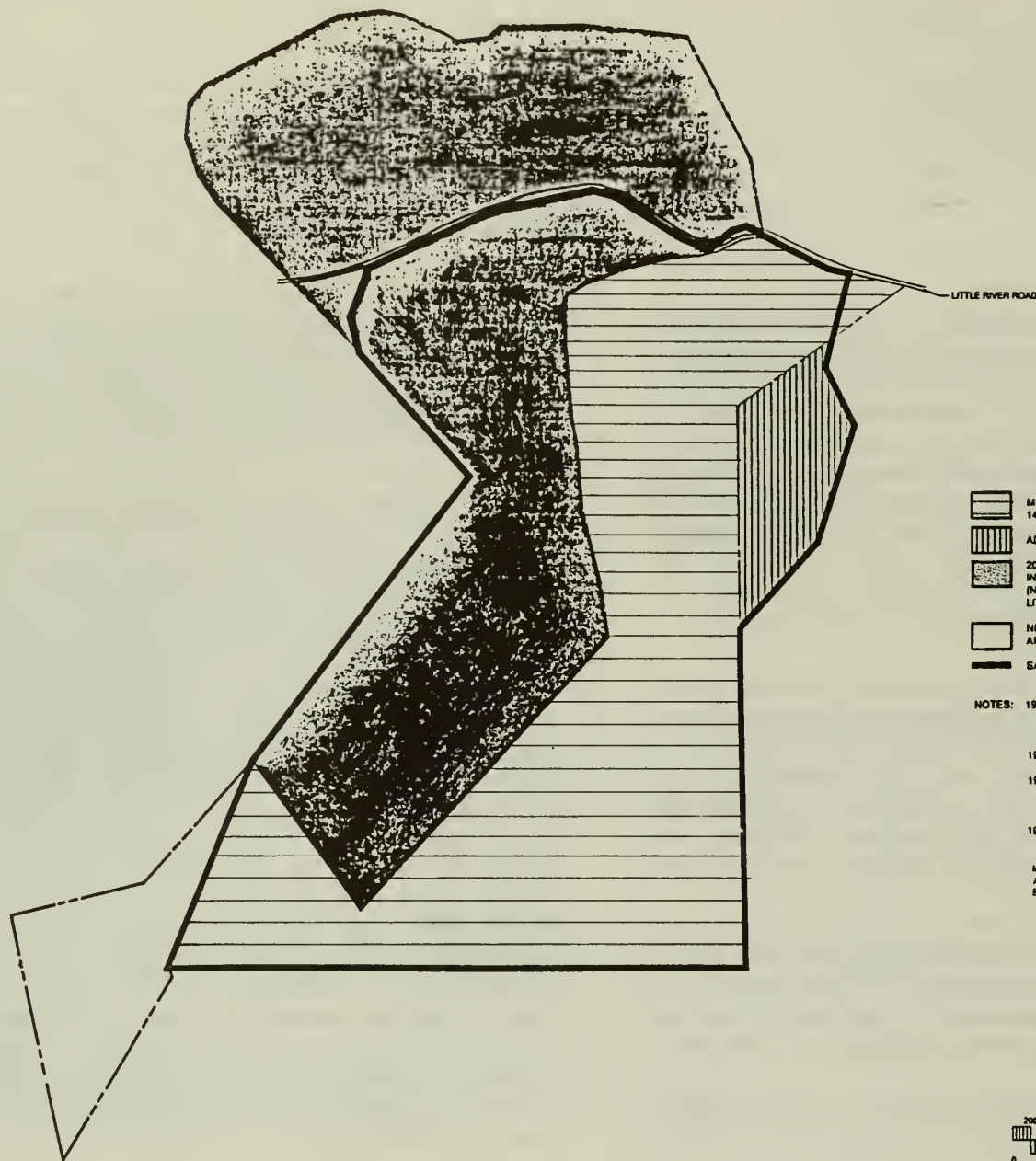
Because traders from Greenville, South Carolina, bartered with the Indians on these outcrops lying near the Saluda Trail, the area was given the name Flat Rock (Bailey 1980, 10). From here tens of thousands of animal hides were carried back to Charleston, South Carolina, to be shipped to England.

By the turn of the eighteenth century, a small agrarian community was established. This economy, including light

manufacturing such as grist mills, furniture-making for local use, and brick-making, would prevail throughout the nineteenth century. A small number of quarries provided the stone commonly used for building houses (Fain 1980, 92).

MEMMINGER PERIOD: 1838-1888 (Fig. 2.2)

By the mid-1820s, several statesmen and planters from Charleston had built summer homes in the Flat Rock area. The mountain air and quiet atmosphere appealed to those seeking reprieve from the city's heat and humidity. Christopher Gustavus Memminger, statesman, lawyer, and subsequent Secretary of the Confederate Treasury, bought his first tract of land for a summer home in 1838 (Deed Records, Buncombe Co. Courthouse). He called this 143 1/2 acre purchase Rock Hill for the large rock exposures on the property (Bailey 1980, 11; Frazier and Paige 1981, 9). Later that same year, the eastern portion of the estate, including the main house area, was acquired (Frazier and Paige 1981, 11). Records from 1842 indicate that he purchased a spring tract of 15 1/2 acres adjoining his property from A. S. Willington. The tract was not staked but was included in the survey of a larger 1850 purchase of 205 acres to the north and west of his land. The Saluda Tract included the side lake area, the spring on Glassy Mountain already purchased, and the Saluda Cottages to the north of then Crab Creek Road. This property across the road was



- MEMMINGER'S "ROCK HILL"—INITIAL PURCHASE OF 143 1/2 ACRES IN 1838.
- ADDITIONAL 1838 PURCHASE.
- 205-ACRE "SALUDA TRACT" PURCHASED BY MEMMINGER IN 1850. DEED INCLUDED 15 1/2 ACRES "SPRING TRACT" (NOT SURVEYED) ACQUIRED IN 1842. LAND NORTH OF LITTLE RIVER ROAD SOLD TO C. C. PHICKNEY IN 1850.
- NPS ADDITIONS OF 22 1/2 ACRES BY 1982. TOTAL PARK AREA PRESENTLY 267 ACRES.
- SANDBURG PROPERTY LINES—1945.

NOTES: 1900—SMYTH ACQUISITION OF 252-ACRE "ROCK HILL". (PROPERTY LINES NOT ILLUSTRATED DUE TO INCONSISTENT SURVEY RECORDS.)

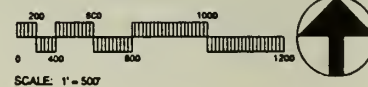
1945—SANDBURG PURCHASE OF 242-ACRE "CONNEMARA".

1981—RIGHT-OF-WAY GIVEN TO NORTH CAROLINA STATE HIGHWAY COMMISSION FOR LITTLE RIVER ROAD IMPROVEMENTS.

1988—242-ACRE SANDBURG ESTATE SOLD TO UNITED STATES OF AMERICA.

MEMMINGER PROPERTY LINES ARE APPROXIMATE. ALL ACREAGE GIVEN IS APPROXIMATE.

SOURCES: HENDERSON COUNTY COURT HOUSE DEED RECORDS; HISTORIC STRUCTURES REPORT FOR CARL SANDBURG HOME NATIONAL HISTORIC SITE BY C. CRAIG FRASER & JOHN PAGE, 1981, DENVER SERVICE CENTER, NPS.



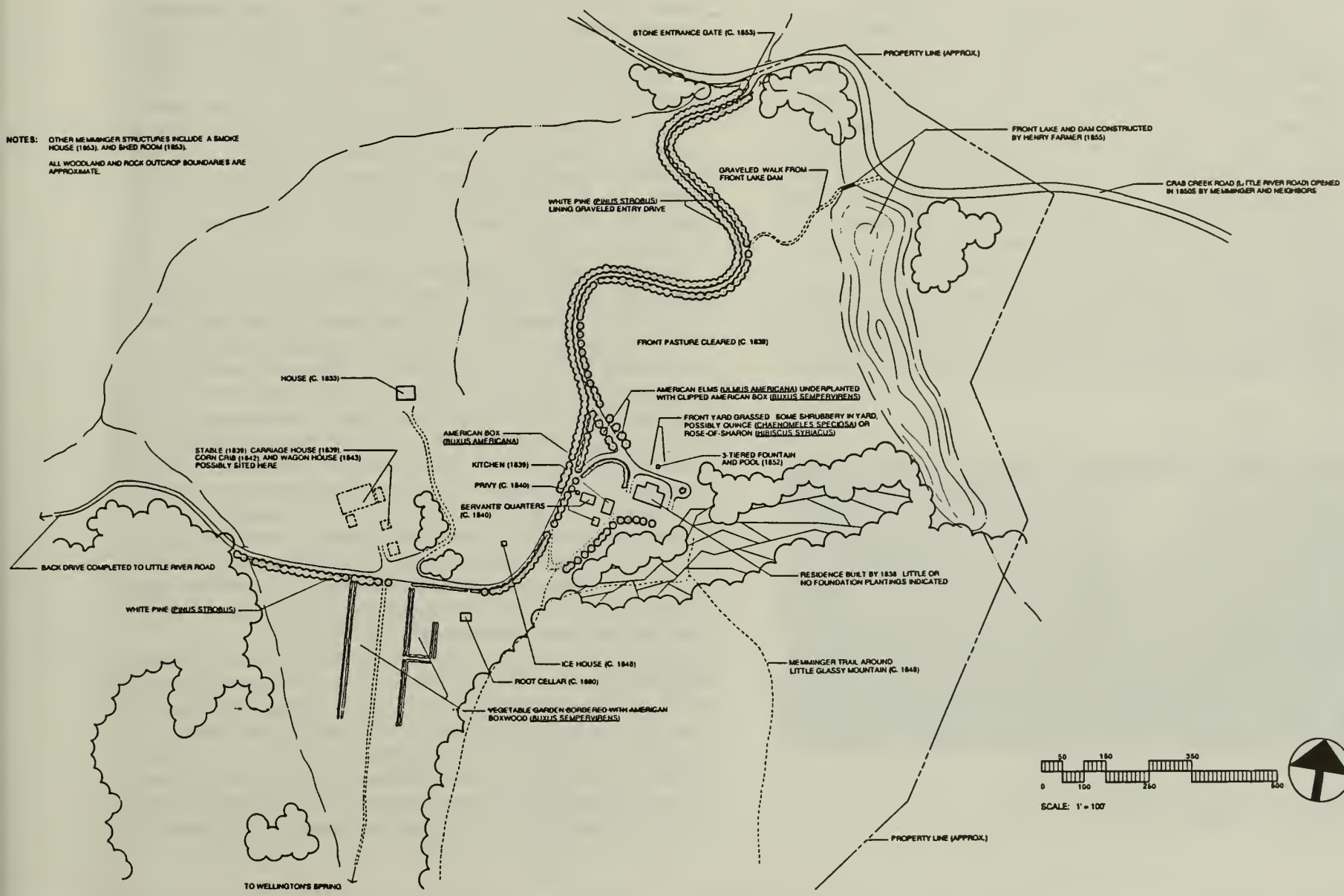


Figure 2.2--Memminger Period--Historic Base Map

sold to C. C. Pinckney the same year (Frazier and Paige 1981, 11; Deed Records, Henderson Co. Courthouse).

Structures credited to Memminger at Rock Hill include the residence (completed by 1838), the kitchen (1839), two servants quarters (no date given but probably c. 1840), a privy (no date but probably c. 1840), a stable (1839), a carriage house (1839), a corn crib (1842), a wagon house (1843), the ice house (1848), a shed room (1853), and a smoke house (1853) (C. G. Memminger Papers). An early Memminger sketch of the residence and surrounding structures shows the locations of some of these. The earliest drawing of landscape features of the estate is depicted in Figure 2.3 (C. G. Memminger Papers).

It is not known where Memminger built his stable, carriage house, corn crib, or wagon house. However, one might assume they were sited in the same area of the existing Sandburg barn and surrounding farm structures.

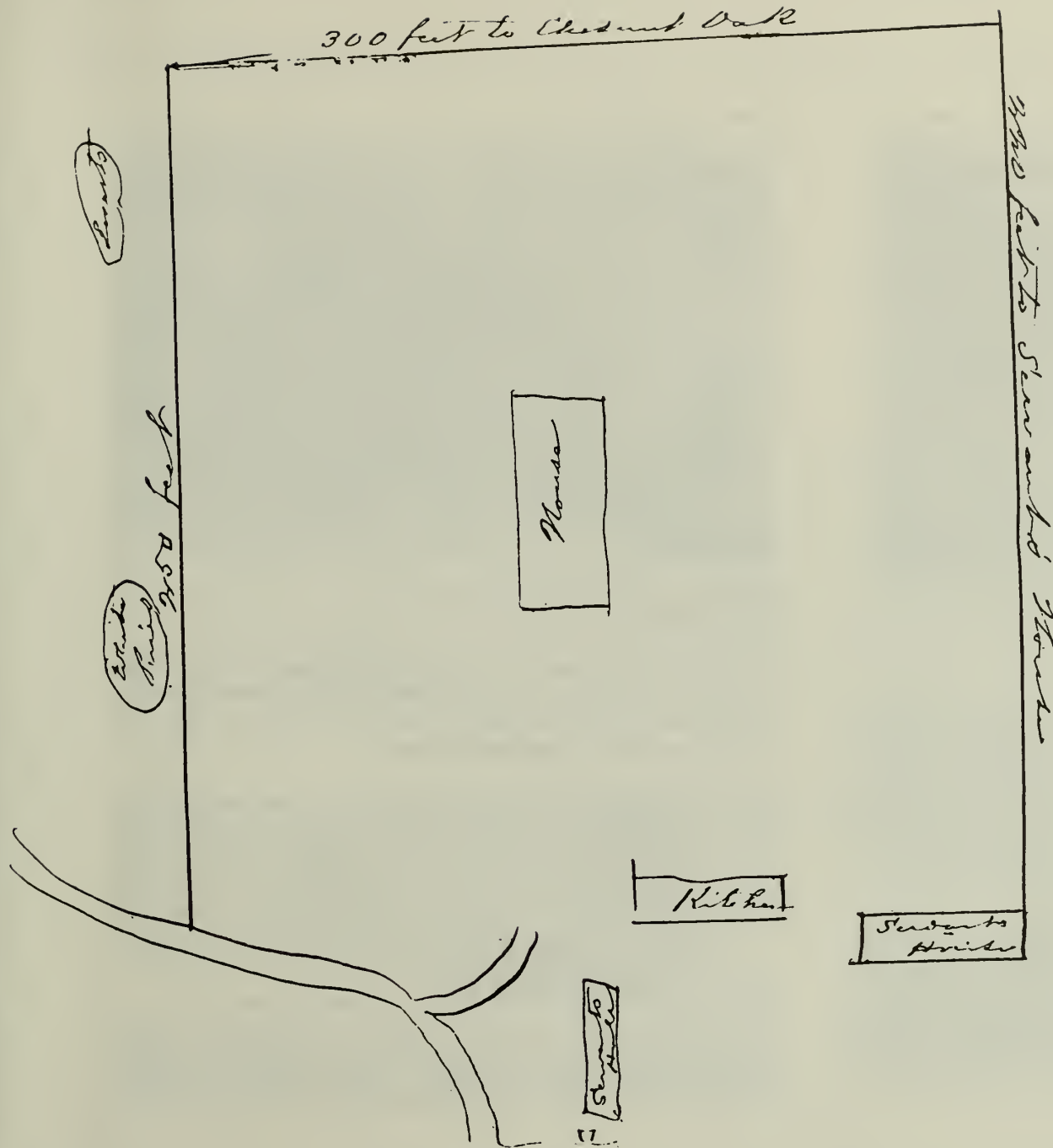


Figure 2.4 Steriopticon of Rock Hill, c. 1880
Photographic Archives, #28466

The earliest photograph of the house, a stereopticon photo, c. 1880, provides a view of the north side including the lawn and formal fountain, see Fig. 2.4 (Photo Archives, CARL). The spring-fed fountain was installed in 1852 (Bailey 1980, 18; C. G. Memminger Papers; Frazier and Paige 1981, 11; Patton 1961). The absence of front steps and the side porch, which later enclosed the Sandburg greenhouse, is conspicuous here. There appears to be no foundation plantings either. References in the Memminger Papers at the Southern Historical Collection at the University of North Carolina, Chapel Hill, date the front lawn to as early as 1853.

Memminger and his neighbors opened Little River Road in the 1850s. Sadie Patton (1961) states that the entrance to the estate was located a few yards east of front lake dam. The drive came across a bridge over the dam and continued its winding way to the main house. However, early Smyth photographs dated 1900-1905, which show the stone entrance gate used by Smyth and subsequently the Sandburgs, suggest this gate may also have been from the Memminger period, see figure 2.5 (Photo Archives, CARL). An entry in Memminger's account book dated 1853 shows a payment for "coping stone for gate and hauling" (C. G. Memminger Papers). Other Smyth photographs of the upper entry drive, taken at the turn of this century, show mature box and elm bordering the drive (figure 2.6). Given the age of these plantings, it is very likely the formality of the drive was laid out under Memminger's direction.

The dam to Front Lake was constructed by Henry Farmer in 1855 (C. G. Memminger Papers). The lake was a source of recreation--boating, swimming, and fishing. Ice was cut from the lake in winter and stored in the ice house for summer months (Frazier and Paige 1981, 12). An early Smyth photograph (c. 1900) shows a boat house at the bottom of the front pasture, possibly built by Memminger (Photo Archives, CARL). No such structure exists today.



Length of Pipe

Distance 18 1/2 feet

Height from base 5 1/2 feet

Let --- 5 1/2 feet

192 Say 200 feet length

Pipes for Swamp on Day 3 feet

Figure 2.3--Memminger sketch of 'Rock Hill'. (From the Memminger Papers, Southern Historical Collection, The Library of the University of North Carolina at Chapel Hill)



Figure 2.5 Entrance Gate, c. 1900
Photographic Archives, #365-9

It is likely that the pasture in front of the house had been cleared by the time of the construction of front lake dam. An 1893 biography of C. G. Memminger describes the estate: "Its lake of pure water, its green sward, its beautiful hills and grand forest trees, among which graveled walks and carriage drives lead up to the seat of a noble hospitality. . ." (Capers 1893, 371).

In addition to clearing land for pasture or vegetables, Memminger built rail fences and installed drainage ditches throughout the farm. Entries in his account book for payments made to hired hands for "ditching" during the years 1845-1856 suggest the work was extensive. It is not known, however, if the ditches were originally lined with stone (C. G. Memminger Papers).



Figure 2.6 Upper Entry Drive, c. 1900
Photographic Archives, #100

Memminger is credited with establishing other landscape features. A 1939 description of the Smyth gardens opposite the drive from the caretaker's house and the barn dates the vegetation there to an earlier time:

A white picket gate leads to the flower and kitchen garden with a thousand feet of paths, enclosed by solid hedges of dwarf box five feet across the level tops and as high as my shoulders. These long hedges of true dwarf box are the finest I know in any Carolina garden and must date from the original settlement of the estate.

(Schaffer 1963, 273).

In another quote, Schaffer attributes this garden, as well as the entry drive to Memminger: "Many details, the precise divisions of the herb and vegetable gardens by box hedges,

the long avenues of firs and pines, may have been influenced by remembered gardens and estates of his German boyhood" (Schaffer 1963, 272).

It is unlikely Memminger remembers much of his homeland as he came to America in infancy. However, he did hire gardeners from Charleston who probably were responsible for much of the garden's designs. Memminger also cut a path behind the house on Little Glassy Mountain for walks through the woods (C. G. Memminger Papers; Bailey 1980, 17). After the Civil War, Memminger lived at Rock Hill year-round until his home in Charleston was restored to him in 1867. He died in 1888.

GREGG PERIOD: 1888-1889

Prior to his death, Memminger deeded Rock Hill to James Jones Gregg in 1865. The Memminger family continued, however, to live on the estate until 1888. There is no record of the Greggs ever having occupied the house. Nor is there a record of any maintenance to the house or grounds (Bailey 1980, 32). It is probable that the estate fell into disrepair during this eleven year period.

SMYTH PERIOD: 1900-1945 (Figure 2.7)

In December 1900, Ellison Adger Smyth purchased Rock Hill from the Gregg estate. A wealthy man, Smyth was a leader in the textile industry and held various offices in national manufacturing and industrial associations. At the height of his career, he was director of thirty-six corporations and a dozen banks (Bailey 1980, 36-37).

Smyth renamed the estate Connemara for its resemblance to his ancestral Ireland (Bailey 1980, 12). For the next twenty-five years, he and his family retreated to their Flat Rock home in the summer and on weekends. In 1925, at the age of seventy-seven, he retired from Greenville, South

Carolina, and moved to Connemara as his year-round residence.

Connemara was a very active farm under Smyth's management. In addition to maintaining vegetable and flower gardens, and a variety of farm animals, he added new features to the farm. These included Side Lake, a three-hole golf course in the side pasture area, and a new walking trail to the top of Big Glassy Mountain (Bailey 1980, 39-40). Side Lake, stocked with bass and perch, provided recreation in the summer. In the winter, blocks of ice cut from this lake were stored in the ice house (Bailey 1980, 44; King 1990).

The entry drive, known by the Smyths as The Avenue, was enhanced by more formal treatments during this period. Stone retaining walls were added to the lower and middle portions of the tree-lined passageway, see figure 2.8 (Photo Archives, CARL). The upper entry drive was kept formal by maintaining the boxwood in stiff conical shapes, see figure 2.6. To the west of the house, Smyth added several shrubs and trees including snowball bush (*Viburnum plicatum*), ginkgo (*G. biloba*), Peegee hydrangea (*Hydrangea paniculata* 'Grandiflora'), flowering quince (*Chaenomeles speciosa*), magnolia (*M. grandiflora*), and bamboo (*Arundinaria* sp.) (Photo Archives, CARL; field observations).

Directly in front of the house, the formal fountain and pool were flanked by two circular flower beds. A sundial was placed nearby. Two photographs show different treatments of the circular pool's edge, one of tall cannas and the other of potted plants (figures 2.9 and 2.10). On the terrace below the fountain were hydrangeas and Rose-of-Sharon, and below them on a third terrace was the fence line of the front pasture. This was later planted with Rugosa roses. The maturity of these roses in early Sandburg photographs indicate that they were probably plantings of the late Smyth period (Photo Archives, CARL). Smyth extended a water line from the fountain down to front lake where he installed a fountain jet near the dam.

2.7--Smyth Period--Historic Base Map

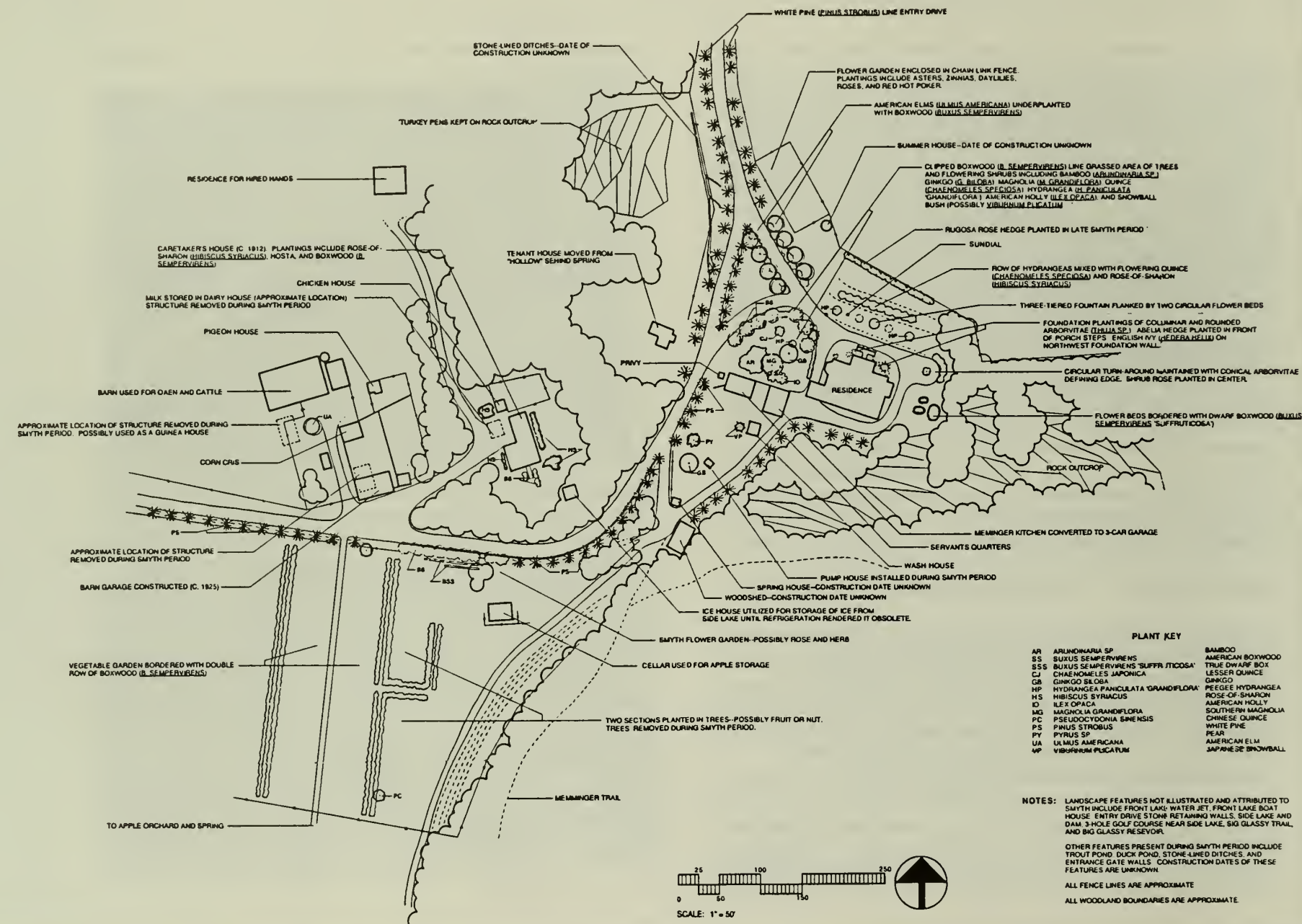




Figure 2.8 The Avenue, c. 1900
Photographic Archives, #118

Photographs of the house show shrubs and flower beds along the north and west foundations, and along the front porch pillars and steps. Ferns grew under the bayfront window. The conspicuous absence of arborvitae and abelia from these photographs indicate that they were planted later during the Smyth period. Vines covered the east and west portions of the front porch. English ivy grew along the foundation walls on the northwest corner of the house, see figures 2.11 and 2.12 (Photo Archives, CARL).

On the east side of the house were three, possibly four oval and rectangular flower beds bordered with clipped dwarf box. Clustered loosely together, the beds varied in sizes, approximately 10 x 20', 10 x 12', and 5 x 10'. No documentation exists on what was planted in them (Photo

archives). A circular turnaround, approximately thirty-five feet in diameter, existed to the north of these beds with a rose bush in the center, see figure 2.13 (Photo Archives, CARL; Polega 1989).



Figure 2.9 Three-tiered Fountain During Smyth Period, c. 1925
Photographic Archives, #2

The house itself underwent facial changes. When the Smyths purchased the estate in 1900, the house was white. Smyth had it repainted a darker color, possibly red or green, but by 1921, it had been repainted white and apparently remained that color until the Sandburg purchase in 1945. The double wooden steps leading to the front porch were replaced with concrete steps by 1921. After this time, or perhaps at the same time, the vines on either side of the porch were removed, and cloth awnings were added to the



Figure 2.10 Three-Tiered Fountain During Smyth Period, c. 1925
Photographic Archives



Figure 2.12 Main House Before 1921
Photographic Archives, #30329



Figure 2.11 Main House, 1901, Photographic Archives



Figure 2.13 Carriage Turn-around, c. 1947
Photographic Archives, #706-14

three sides of the porch. In addition, the porch on the east side of the house was enclosed to become the present greenhouse, see figure 2.14 (Photo Archives, CARL). Smyth also enclosed the back porch, supporting it with a brick foundation. The exact date is unknown.



Figure 2.14 Main House After 1921
Photographic Archives, #30

Sheep grazed in the front pasture (Photo Archives, CARL). A view of the estate from Little River Road would have included this pastoral scene, a reflecting pond at the bottom of a grassy meadow rising to the house above, see figure 2.15. A white wooden boat house sat near the woods on the west side of the lake, see figure 2.16 (Photo Archives, CARL).

E. T. H. Schaffer gives a vivid description of Connemara during this period:

A long winding driveway between white pines ascends a narrow ridge, the lawn that covers it descending to ornamental lakes on each side. The

upper portion of the drive is bordered with old elms and locusts, opening on a formal garden with hedges of dwarf boxwood, an Old World approach. The house stands on stone basement walls, painted white and rising from vivid flower beds, the green of ivy and box, the sparkle of a tiny lily-pool framed by maidenhair ferns. From the front of the house stretches one of the many lovely prospects of these mountain gardens--first a triple fountain, a low hedge of rambler roses, then a lawn that falls two hundred feet to a lake; beyond one looks over miles of green forest to a broken blue horizon line--Sugar Loaf, Chimney Rock, Rumbling Bald, Mount Mitchell, the Craggies.

(Schaffer 1963, 272).



Figure 2.15 Front Lake From Little River Road, c. 1909
Photographic Archives, #50



Figure 2.16 Front Lake and Boat House, c. 1925
Photographic Archives, #54

Smyth employed several people to help maintain his house and farm. His staff included: a caretaker and his family, a coachman, a butler, a cook, a maid, a yardman, and extras hired for summer work (Bailey 1980, 46). Such extra endeavors would have included another flower garden located below the main house near the entry drive. Enclosed in a chain-link fence, this garden was well established at the time of the Sandburg arrival (Polega 1989). Known plantings in this garden included: asters, zinnias, daylilies, roses, and red hot poker (Sitton 1990). A wooden gazebo stood nearby.

Behind the main house, the kitchen was converted to a three-car garage (Bailey 1980, 45-46). The laundry house (now known as the chicken house), spring house, and woodshed were all part of the Smyth landscape. Early photographs show no foundation plantings in back of the

main house. No documentation exists on the vegetation around the other nearby structures.

Water for the main house and farm manager's house was gravity fed from the spring on Big Glassy Mountain. Smyth later built the pump house (date unknown), which brought this water through the spring house and into his home (King 1990; Sitton 1990; Weber 1990). In the springhouse, milk and butter were placed in concrete troughs through which cold water flowed (Bailey 1980, 45). Another source, possibly a backup, was the reservoir on Big Glassy where a pipe brought water to a source near the back of the house (Weber 1990). This reservoir also provided water for the barn (King 1990).

The Swedish house was home for the Smyth's maid and butler (Bailey 1980, 45). The present tenant house was moved twice. Originally located behind the present vegetable garden in the "hollow behind the spring," it was moved to a location closer to the main house. Later, it was moved again to its present location (Bailey 1980, 45; Sitton 1990).

The farm manager's house was surrounded by twenty-five or more althea shrubs. Scarlet sage was planted on the bank directly in front of the house, and hydrangeas were planted in barrels placed along the back drive from the barn to the main house (Bailey 1980, 43). The dairy house located near the back was removed during the Smyth period. It had been used to store milk supplied by Guernsey cows at the barn (King 1990; Sitton 1990).

There was much activity in the barn area. The corn crib (figure 2.17) was built by Smyth's caretaker, Mr. Ballard. The barn was used for oxen and cows. Guernsey cows were milked daily in the milking shed, and their milk was stored in the dairy house (Bailey 1980, 43). Lambs had their own building; squabs were raised nearby in the pigeon house, presently known as the cow shed. Guineas, pheasants, turkeys, and ducks were also present. A lost structure, possibly the guinea house, sat across the barnyard from the

corn crib. A prize bull was kept in a structure near the barn garage, and cattle were kept in one of the side pastures (Bailey 1980, 42-43; King 1990; Photo Archives, CARL; Sitton 1990). Smyth built the barn garage around 1925 to house his cars (King 1990).



Figure 2.17 Smyth Corn Crib, c. 1925
Photographic Archives, #91

The area occupied by the present vegetable garden during the Smyth period was treated in a manner typical of the period. Archive photographs show three rectangular terraces, two of which are bordered by a double row of boxwood, and the third, and most easterly, was also bordered but divided in half by another double row of box. This third terrace enclosed trees, possibly fruit or nut (figure 2.18). A Chinese quince (*Pseudocydonia sinensis*) remains today as evidence of this (field observations). From Schaffer, it is believed this design was laid out by Memminger,

especially as the author described the size and subsequent age of the English box planted here, see the quote on page 23 of this chapter.



Figure 2.18 Smyth Vegetable Garden, c. 1925
Photographic Archives, #138

Bailey describes formal gardens here consisting of roses enclosed in a clipped box border. Trellises, "laden with roses," and a bench existed for the enjoyment of the visitor. "Some of the original boxwoods still border the garden plot, where Captain Smyth had paths cut from east to west so he could walk along them and look down rows that ran north and south" (Bailey 1980, 43).

Schaffer, in his visit in the 1930s, mentions a "flower and kitchen garden with a thousand feet of paths, enclosed by solid hedges of dwarf box . . ." (see complete quote cited earlier in this chapter). This garden was reached through a picket gate and led to the presently known spring garden. Schaffer writes that there were "precise divisions of the

herbs and vegetable gardens by box hedges, . . ." (Schaffer 1963, 272).

A dirt road from the woodshed runs behind the spring garden towards the trout pond. Above the road, southeast of the third parterre, lie terraces that were possibly planted with fruit trees. Two pear trees (*Pyrus sp*) survive in this area now occupied by second growth hardwood (Photographic Archives, CARL; field observations). Behind the vegetable garden, directly south, was an apple orchard. The greenhouse near the Smyths' rose garden was used to store apples.

In 1942, Smyth died at Connemara. The estate lay idle for three years during which time fields, gardens, and shrubbery may have grown untended (Weber 1990).

SUMMARY

The basic design of Connemara can be attributed to Memminger. Site features include structures, pastures, gardens, trails, entry drive and back drive, front lake, and front lake dam. Specific design elements of Rock Hill were more typical of earlier nineteenth century American gardens. Features included little or no embellishments to the house foundation, terracing, an expansive lawn, a formally patterned flower and vegetable garden in rectangles or squares, and graveled walks (Leighton 1976, 364).

Smyth managed his Connemara to reflect a Country Place landscape. To the winding Avenue, he added stone retaining walls. From Little River Road one experienced a pastoral landscape with sheep grazing on a grassy slope rising above the front lake. Around the house, more formal treatments, typical of late nineteenth-century gardens, included carefully clipped boxwood, a lawn filled with flower beds and flowering shrubs, and garden features such as the sundial (Leighton 1987, 230). Seats or benches placed to observe landscape features were considered especially appealing.

Summer houses of lattice and walks or drives lined with cut stone were also typical of the period (Leighton 1987, 239).

CHAPTER THREE

THE SANDBURG LANDSCAPE

This chapter describes Connemara during the Sandburg era. A discussion of the Sandburg philosophy of management follows along with a look at the types of change occurring at the farm.

HISTORIC CONDITIONS

When the Sandburgs moved to Connemara in 1945, the estate had not been occupied for several years and was somewhat overgrown. Immediate work on the farm had been going on for a few months prior to their arrival. In addition to changes made inside the main house, Paula Sandburg had given specific instructions for changes to be made in the barn to accommodate her large goat herd. The family's immediate impact upon Connemara revolved around the goats. Smyth's flat-twisted, steel wire fences were replaced with woven wire, and pastures were cleared of all rhododendron, a shrub poisonous to goats. Other management activities were neglected as more time was needed in managing the Chikaming herd.

Paula Sandburg's help included only a few people who worked at the goat barn and on the grounds--daughter Helga, who later remarried and moved away in 1953; Frank Mintz, the goat herdsman, whose family lived in the farm manager's house; Grady Pace, a day hand; and Leroy Levi, replacing Mintz, the herdsman for ten or more years until 1967. Daughters Janet and Margaret helped in their own

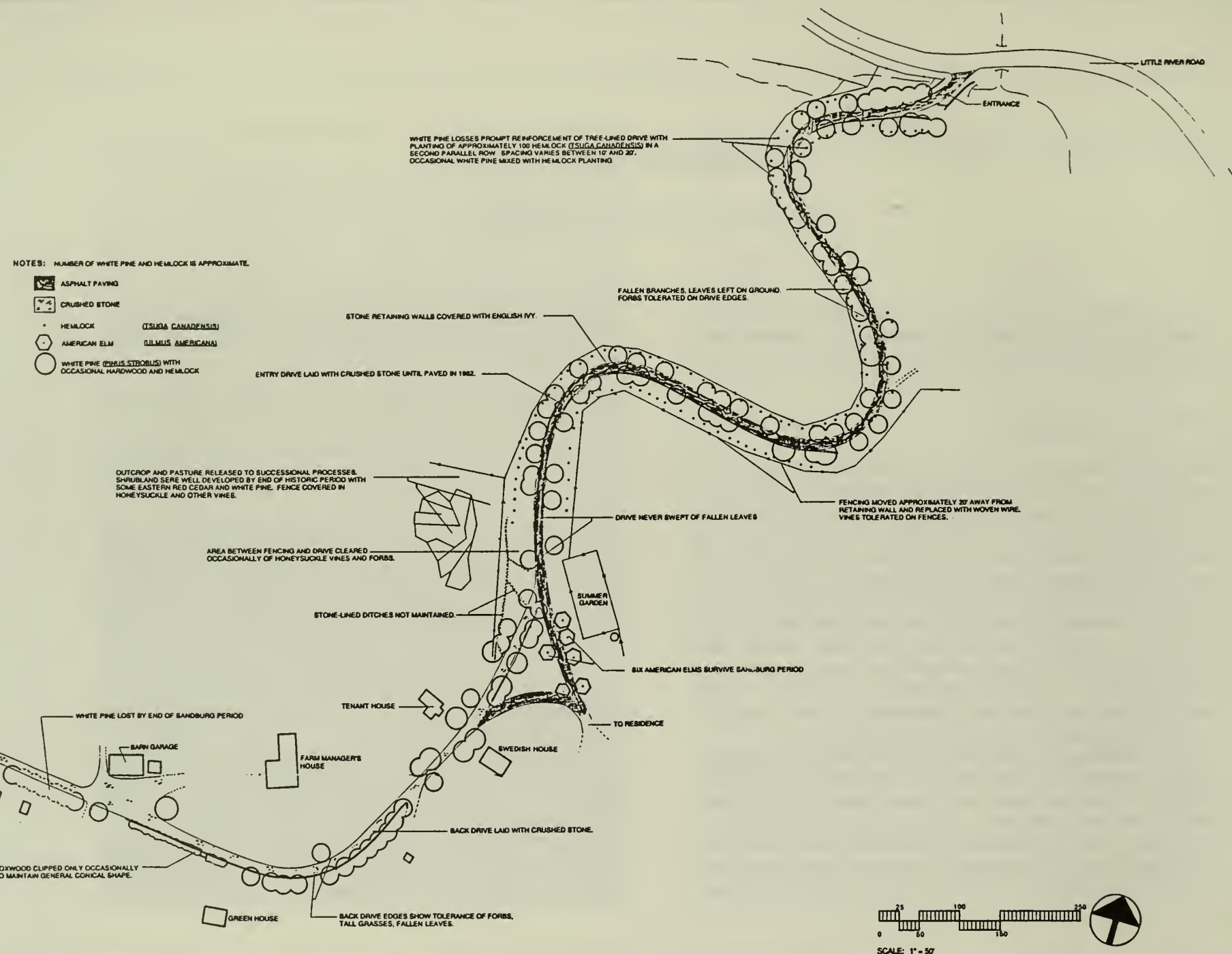
way--Janet feeding the baby goats and Margaret working the summer garden. Occasionally temporary help was hired (Crile 1989).

ENTRY DRIVE (figure 3.1)--The entry drive appears from archival photographs to have been dirt; however, it is very likely that crushed stone was laid at least once during the Sandburg period. In 1962, it was paved and several loads of gravel were put on the back drive (Farm Office Archives, CARL).

Retaining walls built by Smyth remained throughout the Sandburg period. No documentation exists on whether the Sandburgs rebuilt or maintained them. Fences, however, were replaced. Smyth had used Brinkerhoff fencing (flat-twisted, solid lengths of steel) to enclose his front and side pastures, a type not suitable for containing goats. Paula Sandburg replaced these with woven wire. At this time the front pasture fence line above the entry drive retaining wall was moved in (away from the retaining wall) approximately fifteen feet.

Fencing continued along both sides of the entry drive. Across from Margaret's summer garden, the fencing contained a pasture and a rock outcrop. The stone-lined drainage ditches in this area were not maintained.

The entry drive had been an attractive feature for Paula Sandburg on her first visit to Connemara. Paula Polega writes that her grandmother bought the farm because of this



3.1--Entry Drive and Back Drive to Barn--Historic Base Map

"winding driveway banked with one-hundred foot pine trees and an ivy-covered stone wall" (Steichen 1969, 7). By 1945, the stress of age and natural agents was taking its toll on these white pines. Lightning strikes were common, leading to a loss of trees. In the 1950s, Paula Sandburg planted approximately one hundred hemlock (*Tsuga canadensis*), in two parallel rows, behind the declining pines to reinforce the tree-lined avenue.

Fallen branches dislodged by lightning or wind were left on the ground. Forbs and vines were also left to grow. Fence lines were partially covered with honeysuckle and other vines. Ivy, planted above the retaining wall near the front pasture, was not cut back and was allowed to grow up into trees. The pasture area containing the rock outcrop (across from Margaret's summer garden) was never used by the Sandburgs. Released into natural succession, this area rapidly grew into a mixture of invasive species, including brambles, eastern red cedar, privet, and honeysuckle. Occasionally, the area between the drive and the fence would be cut back by hand, usually with a swing blade. Helga noted that her mother and the house cook, Ella Blacklow, cleared this area "whenever they felt like it" (Crile 1989).

The upper entry drive as it forks toward the main house was still lined partially by tall American elms. Only a few of the original clipped American boxwood survived by 1960 (figure 3.2). Six of the elms were existing during the Sandburg period. The box, however, had dwindled from eight, possibly ten, to only two by the same year (Photo Archives, CARL). Paula Sandburg planted several American hollies along this part of the drive. She also planted nandinas, Japanese maples (1949), redbuds, and daylilies (Crile 1989).

At times this area appeared untidy and disarrayed. The boxwood were clipped only occasionally to maintain their general conical shape. Otherwise, the area grew rather



Figure 3.2 Upper Entry Drive, 1960
Photographic Archives, #735-28

rough-looking as little pruning took place, and the drive was never swept of fallen leaves. By the end of the historic period, the upper entry drive had been transformed from a formal, carefully managed landscape of the Smyth period to a naturalized, freer, and more picturesque landscape (Photo Archives, CARL).

BACK DRIVE TO BARN (see figure 3.1)--The back drive from the fork near the tenant house to the barn and beyond was never paved. Crushed stone was laid on the back drive at least once during the historic period (Farm Office Archives, CARL). Aerial photographs indicate the back drive was shaded by trees from the fork to the entrance of the barn. Two or three large hemlock trees stood in front of the tenant house, and at least one large tree stood below the Swedish house (Photo Archives, CARL; Aerial Photos). Late photographs (1968) taken of the drive in front of the farm manager's house show the existing white pines above the

retaining wall and tall boxwood shrubs lining the drive beyond. Opposite the wall, only a few trees stand beside the drive. Evident here is the Sandburg's minimal care of roadsides--leaves left on the ground, forbs growing in front of the retaining wall (figure 3.3). Further west, approximately 50 percent of the white pines planted in front of the buck houses across from the barn were lost during the Sandburg period (Aerial Photos).



Figure 3.3 Back Drive in Front of Spring Garden, c. 1965
Photographic Archives, #101-20

SUMMER GARDEN (figure 3.4)--Margaret's summer garden was defined by a path dividing the planting beds into roughly four sections. Plant materials consisted of perennials and shrubs commercially available during the Smyth period,

1900-1945, plus those which the Sandburgs added during their occupancy of the farm, 1945-1967. Some annuals were planted during this period. Daughter, Margaret, and granddaughter, Paula Polega, both spent time in this garden. A planting plan, drawn by Paula Polega, can be seen in figure 3.5.

This garden was a special place for Paula Steichen Polega as a child. She describes it as "a wild, overgrown, and beautiful place" (Polega 1989). In *My Connemara*, she writes how the garden held roses "of every color which spread themselves over all the garden's bordering fences--their scent overcoming even that of the tall peonies along the pathway" (Steichen 1969, 170). It was so well established that it survived the many years of minimal care provided by the Sandburgs.

The summer garden was partly shaded by surrounding trees. Remaining throughout the time in which the Sandburgs lived at Connemara, the garden was allowed to become overgrown with honeysuckle, privet, weeds, and vines. Margaret would periodically cut back the honeysuckle on the fence, then allow it to grow back (Photo Archives, CARL).

The only structures in this area are the enclosing chain-link fence and the gazebo. The fence remained throughout the Sandburg period. A painted wooden gazebo stood outside the entrance, where the Sandburgs kept garden tools, see figure 3.6 (NPS 1982, 116).

MAIN HOUSE--NORTH SIDE (see figure 3.4)--Near the front of the house the entry drive splits again to form a loop around it. The paved drive goes directly to the carport; the loop around the house is crushed limestone. Late photographs (1965-66) show that this road was re-surfaced at least once during the historic period (Photo Archives, CARL).

PLANT KEY

TREES

- BROADLEAF EVERGREEN
- CONIFER
- DECIDUOUS

SHRUBS

- EVERGREEN
- DECIDUOUS
- MAGNOLIA
- AMERICAN HOLLY
- WHITE PINE
- EUROPEAN LARCH
- AMERICAN ARBORVITAE
- EASTERN ARBORVITAE
- HEMLOCK
- ELM
- BUCKEYE
- YELLOW POPLAR
- RED OAK
- DOGWOOD
- SAUCER MAGNOLIA
- STAR MAGNOLIA
- PAULONIA
- QUINKO
- JAPANESE MAPLE
- REDBUD
- PEAR
- WHITE ASH
- NANDINA
- BOXWOOD
- ROSE
- RUGOSA ROSE
- ROSEBAY RHODODENDRON
- KURUME AZALEA
- AZELIA
- ROSE-OF-SHARON
- PEEGEE HYDRANGEA
- BRIDAL WREATH SPIREA
- FORSYTHIA
- WEIGELA
- SMOKE TREE
- FLOWERING QUINCE
- JAPANESE QUINCE
- HONEYSUCKLE SHRUB
- POKERBLOOM AZALEA
- FLAME AZALEA
- LILAC
- JAPANESE SNOWBALL
- ANTHONY WATERER SPIREA
- BAMBOO
- TRUMPET VINE
- MAGNOLIA GRANDIFLORA
- ILEX OPACA
- PINUS STROBUS
- LARIX DECIDUA
- THUJA OCCIDENTALIS
- THUJA ORIENTALIS
- TSUGA CANADENSIS
- ULMUS AMERICANA
- AESCULUS OCTANDRA
- LIQUIDAMBAR STYRACIFLUA
- QUERCUS SP.
- CORNUS FLORIDA
- MAGNOLIA X SOULANGIANA
- MAGNOLIA STELLATA
- PAULONIA TOMENTOSA
- QUINKO BILOBA
- ACER PALMATUM
- CERCEIS CANADENSIS
- PYRUS SP.
- FRAXINUS AMERICANA
- NANDINA DOMESTICA
- BUXUS SEMPERVIRENS
- ROSA SP.
- ROSA RUGOSA
- RHODODENDRON MAXIMUM
- RHODODENDRON OBTUSUM
- AZELIA GRANDIFLORA
- HIBISCUS SYRIACUS
- HYDRANGEA PANICULATA
- HYDRANGEA
- SPIRAEA PRUNIFOLIA
- SPIRAEA INTERMEDIA
- WEIGELA FLORIDA
- COTINUS COGGYRIA
- CHAENOMELES SPECIOSA
- CHAENOMELES JAPONICA
- LONICERA SP.
- RHODODENDRON PERICLYMENOIDES
- RHODODENDRON CALENDULACEUM
- SYRINGA VULGARIS
- VIBURNUM PLICATUM
- SPIREA X BUMALDA
- ANTHONY WATERER
- ARUNDINARIA SP.
- CLEMATIS

- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- TERRACING
- STONE RETAINING WALL
- BIRD FEEDER
- BIRD BATH

- ASPHALT PAVING
- CRUSHED STONE



NOTES: DRAWING REPRESENTS LATE SANDBURG PERIOD (C. 1963)



Figure 3.4 Residence Area, Historic Base Map

The only structure in front of the house was Memminger's three-tiered fountain and circular pool. The fountain was dismantled shortly after the Sandburgs arrived, leaving the quiet pool in which the grandchildren could wade and sail boats (Steichen 1969, 12).



Figure 3.6 Summer House, c. 1950
Photographic Archives, #399-1

VEGETATION, FRONT LAWN--Early photographs (circa 1947) of the front yard and terraces show grass on the terraces with a few shrubs remaining from the Smyth era--rose-of-sharon, bridalwreath spirea, flowering quince, and Peegee hydrangeas (Photo Archives, CARL). A continuous row of wild roses (*R. rugosa*) grew along the fence line, where they remained until some were partially removed. Aerial photographs from 1963 show that the center line of roses had been removed with the east and west edges still remaining.

Replacements for the roses varied. For a very short period castor bean shrubs (*Ricinus communis*) were planted with marigolds placed in front of them (Photo Archives and Farm Office Archives, CARL). By 1961, a bed of dahlias, zinnias, and marigolds were planted in front of the fence line, and the castor bean shrubs were removed, see figure 3.7. Other shrubs were added around 1965. They included: forsythia (*F. x intermedia*), butterfly bush (*Buddleia davidii*), weigela (*Weigela florida*), smoke tree (*Cotinus coggyria*), and bridalwreath spirea (*Spirea prunifolia*) (Photo Archives, CARL; Field Observations).



Figure 3.7 Dahlia/Zinnia Bed, c. 1960
Photographic Archives, #288-5

Photographs also indicate a varying maintenance policy here. At times the roses were allowed to grow unchecked to beyond the height of the fence. Other photographs show them pruned back. The shrubs planted in the mid to late 1960s had grown to seven feet by 1968, indicating little pruning.

Paula Sandburg prepared the flower bed every spring with simple plantings. Most zinnias and marigolds came from local nurseries in Hendersonville. "Cut and come again" varieties of zinnias were commonly grown (Photo Archives, CARL). She also preferred simpler varieties of dahlias, which would have come from local nurseries or from mail-order catalogs such as *Park Seed* or *Vaughan's Gardening Illustrated* (figure 3.8). Dahlias were staked when necessary. In autumn, the tubers were dug up, labeled, and stored in the basement (Crile 1989; Polega 1989b).

Paula Sandburg's pride in this part of the farm is exemplified in the amount of care given to this bed and the front terraces of the house. Although the lawn was not cut until it had grown five to six inches tall, the rows of flowering shrubs and annuals seen beyond the tall grass enhanced the view from the porch of the front pasture and front lake. This was a view her husband greatly admired, see figure 3.9 (Polega 1989a).

Paula Sandburg is also credited with planting more flowering trees west of the circular pool. Two saucer magnolias (*Magnolia x soulangiana*) and two pink dogwoods (*Cornus florida* var. *rubra*) were added to the Japanese maples (*Acer Palmatum*) planted in 1949 (Photo Archives CARL). Exact dates of plantings are unknown.

VEGETATION, NORTH FOUNDATION--Early photographs indicate the Sandburgs inherited several foundation plantings from the Smyth era. By 1960, however, many had been removed. Those carried over from the Smyth period included abelia (*Abelia grandiflora*), arborvitae (*Thuja occidentalis* and *T.*

orientalis), and bridalwreath spirea (*Spirea prunifolia*) (Photo Archives, CARL). These remained throughout the Sandburg period.



Figure 3.9 Paula and Carl Sandburg in Front Yard. Note height of Lawn Grass, c. 1960. Photographic Archives, #407-4

Several shrubs were added in the early 1960s. They include: azalea (*Rhododendron obtusum*.), rhododendron (*Rhododendron* sp.), cinnamon ferns (*Osmunda cinnamomea*), occasionally some annuals, flowering quince (*Chaenomeles speciosa*), and Bumald spirea (*Spiraea x bumalda*) (Photo Archives, CARL). Two of the six columnar arborvitae inherited from the Smyths were removed by 1950. The remaining four around the porch were removed around 1965 and replaced in the late 1960s or early 1970s (Photo Archives, CARL).

Shrubs were pruned infrequently. The bridalwreath spirea and the abelia were allowed to grow tall and straggly, reaching heights of five to seven feet respectively, see figure 3.10 (Photo Archives, CARL). Ground covers included

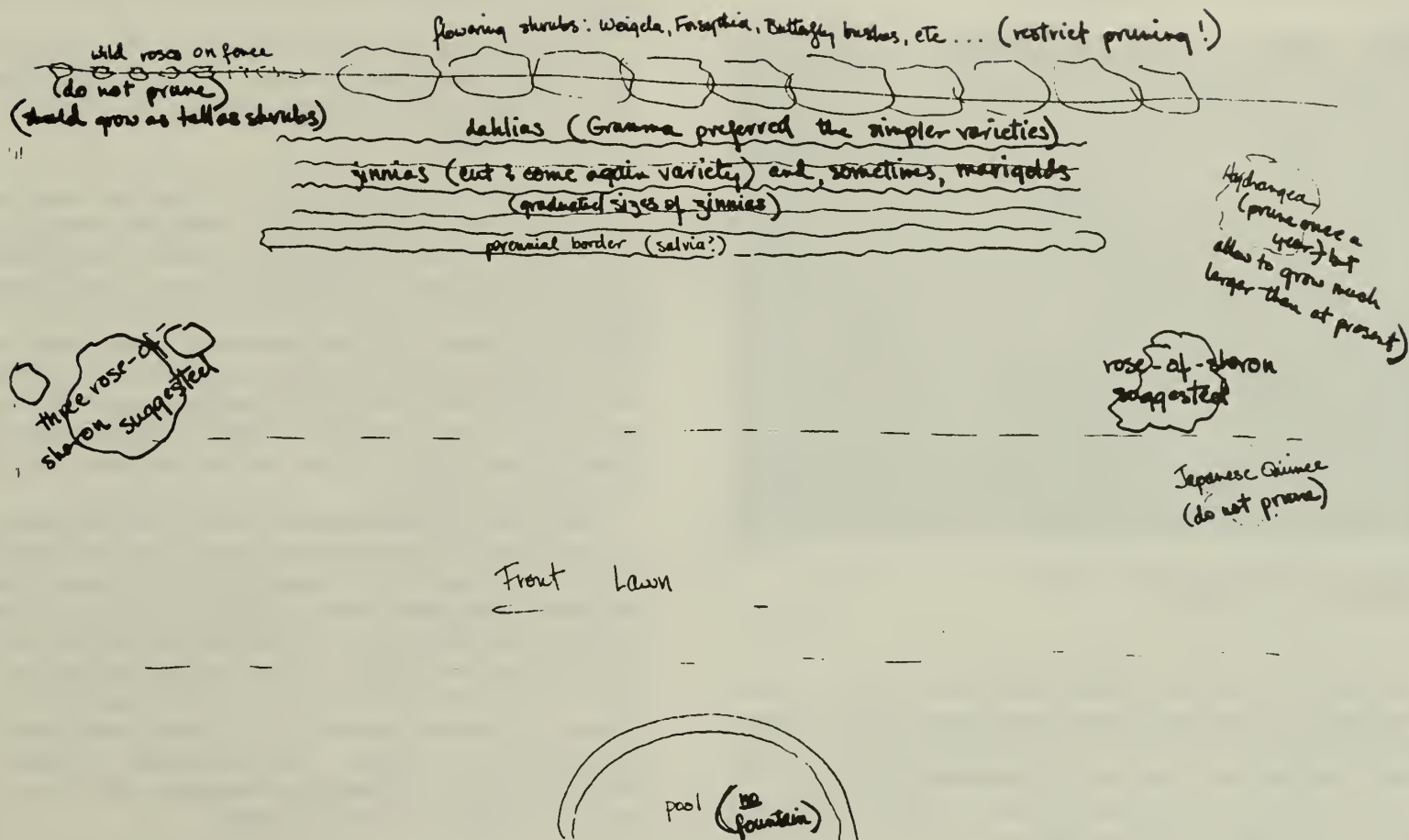


Figure 3.8 Paula Steichen Polega's Plan of Front Yard Plantings
(Photographic Archives, CARL)

annuals, ferns, and weeds. Paula Polega mentioned, "...we tried to keep things generally clean there [but] it [was] a little weedy looking . . . and it [was] not really perfect . . ." (Photo Archives, CARL). She illustrated this part of the foundation bed as seen in figure 3.11.



Figure 3.10 Front of Main House, c. 1968
Photographic Archives, #562

English ivy (*Hedera helix*) grew freely on the stone foundation and wooden exterior of the house. This included the stone pillars of the front porch (Photo Archives, CARL). A tall trumpet vine grew on the northwest corner of the house early in the Sandburg period. These vines were removed whenever the house was painted, then allowed to grow back (Photo Archives, CARL).

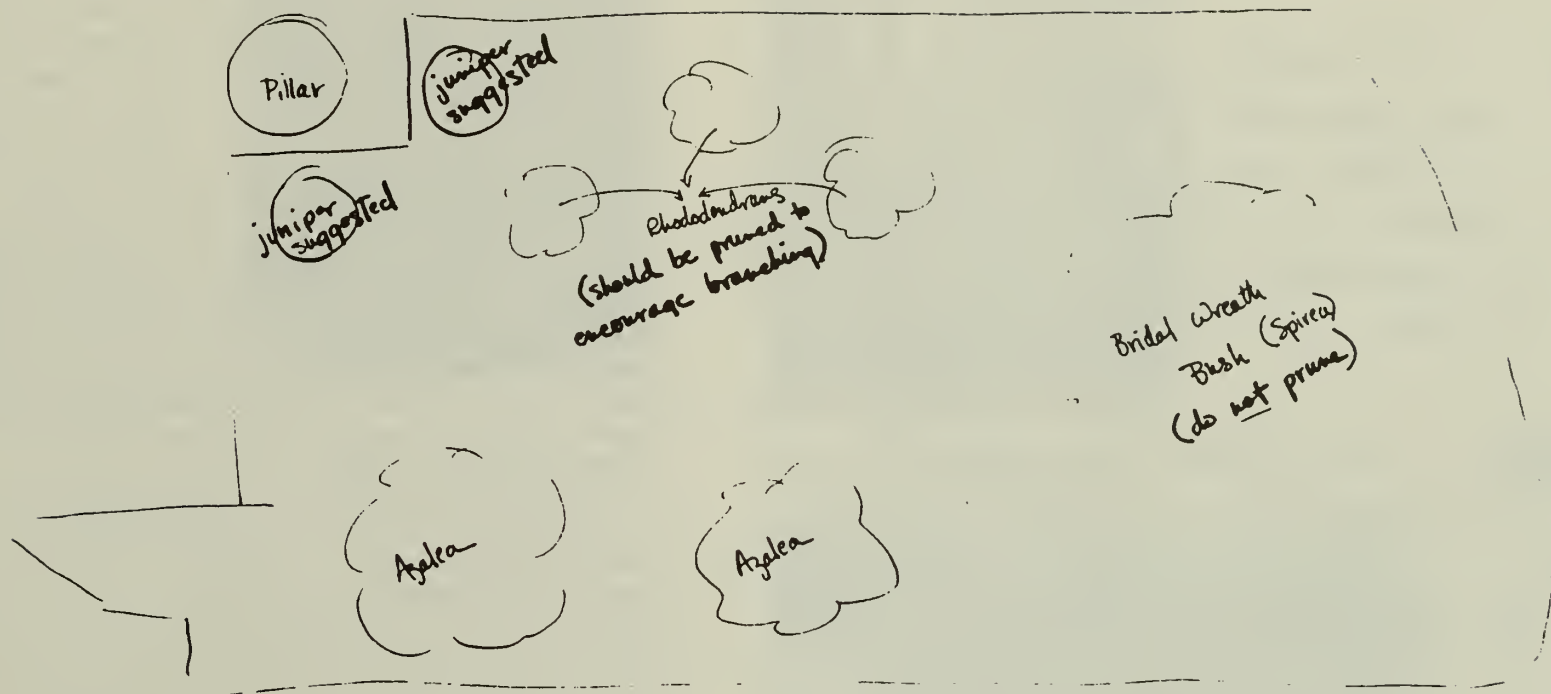
MAIN HOUSE, EAST SIDE (see figure 3.4)--Early photographs (circa 1949) indicate the Sandburgs did not maintain the carriage turnaround on this side of the house. By 1961 this part of the drive had returned to grass and was maintained as such throughout the Sandburg period (Photo Archives, CARL).

An outside pen of wire fencing for the baby goats kept in the furnace room was put up early in the Sandburg period. The animals could get out through an opening in the foundation wall.

VEGETATION, EAST SIDE OF HOUSE--The tall conical arborvitae edging the carriage turnaround remained throughout the Sandburg period (Photo Archives, CARL). The large shrub rose remained until the mid-1960s, when Paula Sandburg had it removed (Polega 1989b). It is not known if the Sandburgs used the box bordered flower beds in the immediate years following their arrival in 1945, although it is very likely. However, by 1960 only one was surviving, the others had been removed. Paula Polega believed her grandmother used one flower bed for her lilies and removed the boxwood edging.

The lily garden, established around 1950, included mostly daylilies (*Hemerocallis* sp.) and hardy lilies (*Lilium* sp.), but also delphiniums, chrysanthemums, garden phlox, dahlias, petunias, marigolds, sweet alyssum, creeping buttercups, and butterfly weed (figure 3.12). This bed, like the one along the front yard fence line, received more attention than most other areas of the farm. It was weeded, and flowers were chosen to maintain variety of color and continuous bloom throughout the season. Late additions, around 1965, included zinnias, impatiens, and small shrub roses, see figure 3.13 (Photo Archives, CARL).

Area to the right of the front porch:



tips

Ground cover is forns. On occasion, Grandma planted perennial flowers in this area - on a limited basis. We might consider a few: daffodil bulbs for spring color and phlox for summer, autumn color - some clover in back for summer color & height

Figure 3.11 Paula Steichen Polega's Plan of the North Foundation Bed (Photographic Archives, CARL)

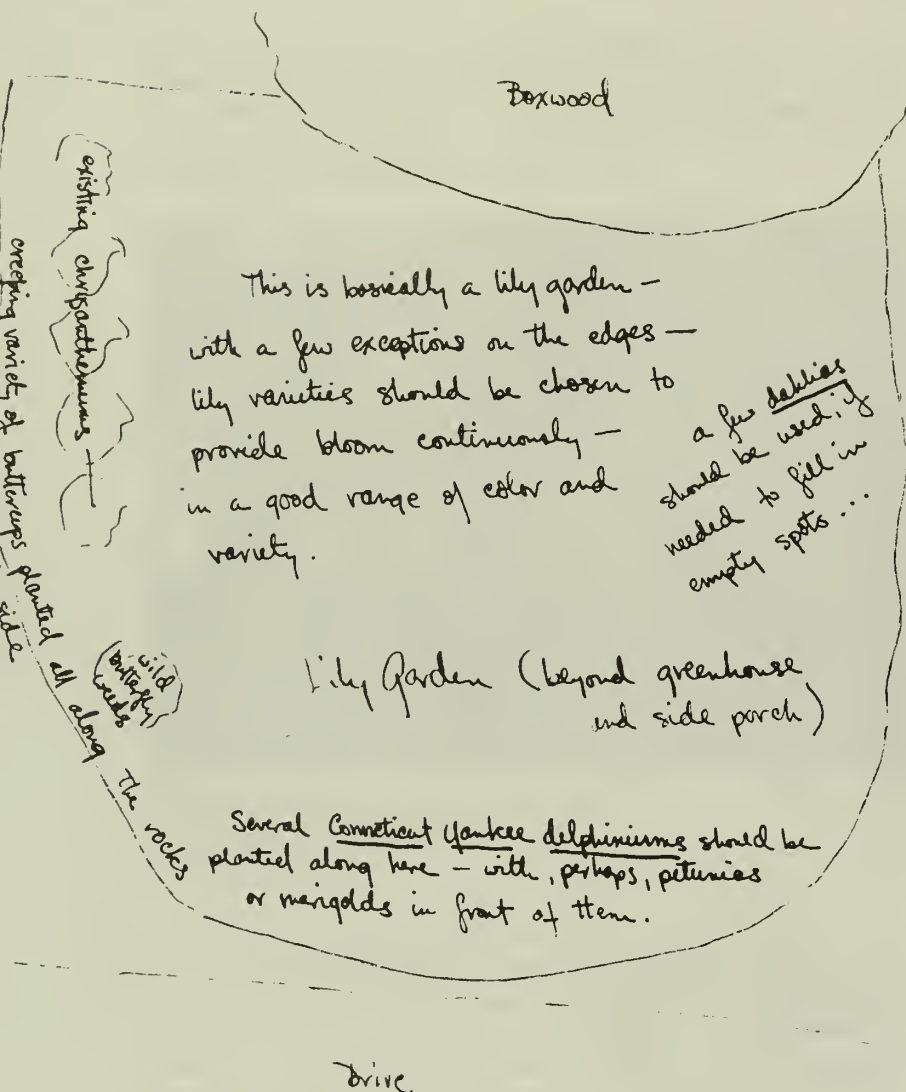


Figure 3.13 Paula Sandburg in her Lily Garden, c. 1965
Photographic Archives, #167-21

Figure 3.12 Paula Stelchen Polega's Plan of the Lily Garden
Photographic Archives

Other Sandburg additions to the east side of the house were a pawlonia tree (*Pawlonia tomentosa*) planted around 1955, and a grouping of forsythia (Photo Archives, CARL). The exact planting dates are not known.

VEGETATION, EAST FOUNDATION--Nothing is known of the existing foundation plantings on this side of the house at the time the Sandburg family arrived. Throughout the Sandburg period, however, plantings varied almost yearly (Photo Archives, CARL). Early photographs (circa 1950) show Paula Sandburg as having planted tomatoes here (Photo Archives, CARL). Paula Polega's plan (figure 3.14) shows cleomes, nandinas, shasta daisies, daylilies, chrysanthemums, and impatiens, with English ivy and morning glories growing on the trellis below the greenhouse. Late photographs (1965-67) show additional plant materials: tall asters (possibly *Aster tataricus*), liriopse, and wild potato vine. This area was full of flowers, very informal, rarely weeded, and appearing somewhat wild and untidy (figure 3.15 and 3.16).

MAIN HOUSE, SOUTH SIDE--The retaining wall south of the house remained throughout the Sandburg period. It is not known if it was ever repaired. Above the retaining wall, several bird feeders were kept so the family could enjoy watching birds from the dining room window. These feeders were atop metal posts, attached to the trunks of trees, or were the very stump of a tree cut down. A birdbath was also placed there (Photo Archives, CARL). Margaret lavishly fed the birds all year round.

Several bird feeders were also attached to the house--one in front of the dining room window, and another outside Margaret's window overlooking her mother's lily garden. In addition, a wren house hung from the cornice of the front porch (Photo Archives, CARL).



Figure 3.15 East Foundation Bed, c. 1965
Photographic Archives, #91-30



Figure 3.16 East Foundation Bed, c. 1965
Photographic Archives, #29-9

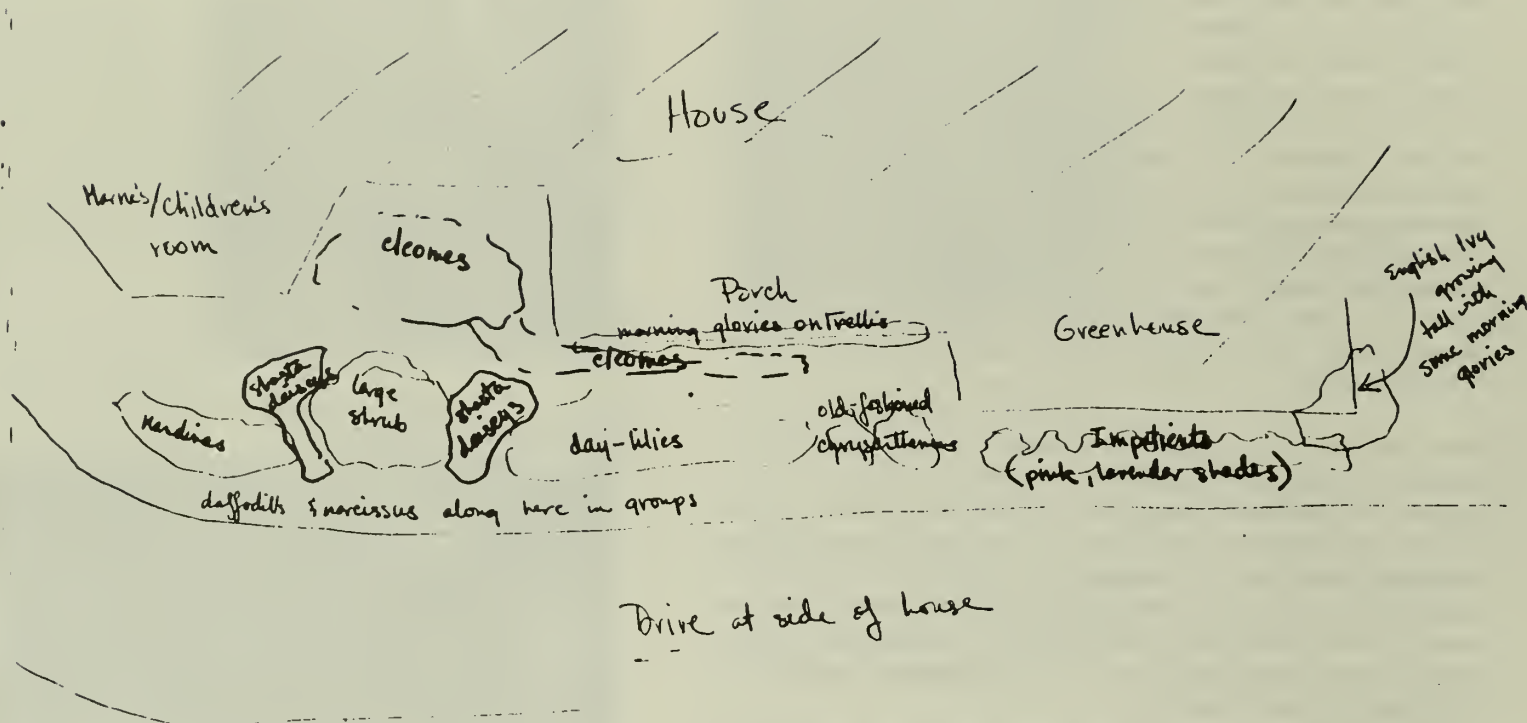


Figure 3.14 Paula Stelchen Polega's Plan of the East Foundation Bed
(Photographic Archives, CARL)

VEGETATION, SOUTH OF MAIN HOUSE--Information about this area is sketchy. Most inferences are made from photographs of the early 1960s. The immediate area around the bird feeders remained free of any understory and had a ground cover of low-growing herbaceous species (figure 3.17). White pine and hemlock dominated with some rhododendron and young hardwoods growing south of the feeding area. Directly west of the feeders grew small native azaleas, dogwood, and other small woody species. The area appears to have never been managed, exhibiting the typically wild, unkempt nature of Connemara at that time, see figure 3.18 (Photo Archives, CARL).



Figure 3.17 Bird Feeding Area South of Main House
Photographic Archives, #701-29



Figure 3.18 West of Bird Feeding Area; Entrance to Kid Goat Pen, c. 1960
Photographic Archives, #530-1

By the mid-1960s the character of the back of the house was changing. Ground covers west of the bird feeders consisted of honeysuckle, English ivy, and some periwinkle. Shade became heavier as understory trees grew. East of the feeders, grass was planted (exact date unknown) and by the late 1960s was being maintained on a similar basis as the front lawn (Photo Archives, CARL).

VEGETATION, SOUTH FOUNDATION--Little information exists on this foundation bed until later in the historic period. A 1959 winter photo shows a bed partially covered with grass. By 1961, a young mimosa tree had been planted with various flowers (possibly heliopsis, coreopsis, marigolds, and dahlias) (figure 3.19). Helga Sandburg recalls flowers there the entire length of the house (Crile 1989). Paula Polega recalls the foundation bed was an area with which her

grandmother always had trouble with. Shade and/or soil conditions made it difficult to keep plantings there. Many times, potted house plants were brought out and planted here for the summer, and occasionally, she would put impatiens there. Nonetheless, the area varied from year to year (Polega 1989b).

By the mid-to late 1960s, Paula Sandburg had put in several varieties of shrubs--nandina, rose-of-sharon, rhododendron, azalea, and mahonia. Ground covers included ivy, grass, daylilies, leucojum, and periwinkle. Late photographs also show foxglove and yellow daylilies in this bed (Photo Archives, CARL).



Figure 3.19 Paula Stelchen Polega with Brother, John Carl, Near South Foundation Bed, c. 1960. Photographic Archives #325a-35

MAIN HOUSE, WEST SIDE--The paved entry drive ends here at the carport. Past this point, one can pull into the garage. Going from the house to the barn, the drive is paved to the

tenant house. Both sides are lined with curbs of rough cut stone, remnants of the Smyth period. The white wooden posts at the entrance of the circle drive around the house remained until the early 1950s (Photo Archives, CARL).

VEGETATION, GINKGO/MAGNOLIA AREA--The west side of the main house contains many remnants of the Smyth period, which lasted the duration of the Sandburg period (figure 3.20). Of these, Paula Sandburg made only a few changes. The snowball bush (possibly *Viburnum plicatum*) was replaced with a Peegee hydrangea (*Hydrangea paniculata* 'Grandiflora') very early after the Sandburgs arrived in 1945. Part of the three-foot tall box hedge along the drive from the carport was removed in the mid-to-late 1960s and replaced with nandinas, forsythia, and daylilies. One American holly was also planted nearby; the exact date is unknown. The remaining hedge survived the entire Sandburg period (Photo archives, CARL). Paula Sandburg also added a few lilac shrubs (*Ssyrynga vulgaris*) near the south end of this hedge.



Figure 3.20 Ginkgo/Magnolia Area West of House, c. 1950
Photographic Archives, #480-4

The large conical boxwood shrubs bordering this garden were trimmed only occasionally and then only to keep their general original shape. The trimming was never perfect and the result was a rough conical shape with the shrubs adding some of their own personal character. They grew to about eight feet in height.

Grass in this area was maintained similarly to that of the front lawn. It was allowed to grow rather tall, five to six inches, before being cut. Paula Polega recalls this garden as being kept "clean," and not overgrown, ". . . a kind of romantic, secret garden look to it . . ." (Polega in Photo Archives, CARL). Such comments suggest it received similar treatment to that of the front yard.

The bamboo grove was an area greatly enjoyed by the children, and possibly a source of staking materials for the gardens. Very early photographs show this area to be small, approximately fifteen by fifteen feet, with large specimens of bamboo, two to three inch caliper, which were thinned out so that one could see easily beyond it (Photo Archives, CARL). Helga recalls the grove never looked that way again, that the bamboo suckered and became dense. Periodically, harsh winters would kill them back, so that they never moved beyond their original location (Crile 1989; Polega 1989b).

VEGETATION, WEST FOUNDATION--The Sandburgs planted very little alongside the western side of the house. Photographs show grass and ivy as ground covers, with the English ivy growing on the stone foundation of the house. A trumpet vine (*Campsis radicans*) grew up the northwest corner of the carport and on the same corner of the house.

Late photographs, 1968, show small flowering plants below the bay window. In an interview, Paula Polega recalls the trouble her grandmother had planting anything here and suggests these might be impatiens "as a last resort" (Polega 1989b).

CHICKEN HOUSE AND SURROUNDING AREA--This area includes the chicken house, Swedish house, family garage, pump house, spring house, and woodshed. The chicken house, formerly a wash house, was used for two purposes. Chickens were kept in the southern half and in the adjacent fenced lot. Kid goats were kept in the northern part. The Swedish house was a storage place for Sandburg's books, magazines, and research materials (NPS 1982, 116). In the spring house, Brie and Neufchatel cheeses were cured before being brought to the house to be paraffined or transferred to cold storage (Steichen 1969, 41). It is not known if the Sandburgs ever repaired or rebuilt any part of these structures.

Fencing consisted of existing wooden paling and woven wire fences, which were put in to keep chickens and goats. On each side of the entrance gate to the kid goat pen, a wooden snow fence was attached to the existing woven wire. Later photographs show only part of this doubled with snow fencing. The other half is doubled with more woven wire (figure 3.21). It is not known how the other sections of fencing were treated.



Figure 3.21 Kid Goats in Pen Near Chicken House, c. 1965
Photographic Archives, #45-103

A narrow dirt road leads from the family garage to the woodshed. Many times the family took this path to the spring garden on their way to the goat barn.

It appears that none of the pens were maintained with any intensity. Kid goats were large enough in number to tread down tall grass and other forbs. The chicken side was equally overgrown. It had a "... real jungle look to it," as Paula Polega remembered it. All fences were tangled with honeysuckle or wild potato vines (*Ipomea sp.*) (Photo Archives, CARL). Trumpet vine grew on the wooden fence between the family garage and Swedish house (Crile 1989; Photo Archives, CARL).

Late photographs (mid-1960s) indicate plantings of rose-of-sharon, a small mimosa tree, and an evergreen (possibly a spruce) just outside the gate to the goat pen. Irises and ferns grew on the garage's southeast corner, see figure 3.22 (Photo Archives, CARL).



Figure 3.22 Garage Corner and Chicken House, c. 1965
Photographic Archives, #87-1

TENANT HOUSE--Vegetation around the tenant house consisted of grass and a few hemlock trees lining the back drive to the barn. Little is known of the maintenance of the area; however, the nearby pasture was released into hardwoods and never used by the family. Photographs show early second growth hardwoods directly west of the structure. In front, grass and a few forbs were allowed to grow tall before being cut (figure 3.23).



Figure 3.23 Tenant House, c. 1967
Photographic Archives, #103-2

SPRING GARDEN (figure 3.24)--The green house, or root cellar, located in this area was not used much by the Sandburgs and fell into disrepair during their time at Connemara (figure 3.25). The nearby water storage tank was used by the Sandburgs. It is not known if they or the Smyths had it installed.

Our knowledge of fence lines in this area is sketchy at best. Aerial photos and photo archives indicate several connecting in the spring garden area. The wooden gate entrance to the garden from the back drive was removed early in the Sandburg period (Photo Archives, CARL).



Figure 3.25 Green House, c. 1950
Photographic Archives, #389-1

Remnants of the Smyth gardens survived the Sandburg period. It is not certain exactly what was encountered in 1945, but flowering bulbs, shrubs, and boxwood are recalled by family members. Paula Polega remembered the spring garden as being wild and overgrown except for one grassy area where jonquils, "hardy little . . . Wordsworth type of little jonquils," and other narcissi came up. Flowering quince (*Chaenomeles speciosa*), forsythia, bridalwreath spirea, and boxwood (*Buxus sempervirens* 'Suffruticosa' and *B. sempervirens*) were planted here (Polega 1989b). In addition, a tremendous white oak (*Quercus alba*), sweetshrub (*Calycanthus floridus*), and low hedges of dwarf boxwood forming a rectangular enclosure existed here. Paula Sandburg buried a few of her prize does in this enclosure, see figure 3.26 (Photo Archives, CARL). A large oak in this garden died and was removed by 1963.

The possible remains of a Smyth herb garden is remembered in Paula Steichen Polega's recollection that her mother Helga had an herb garden:

[It was] set in a corner of the once-formal spring garden, [which] grew wild and overgrown by August, not so much through neglect as through Helga's desire to have things in their natural state. It was a fine garden, wild as it was, and we watched or followed her often as she gathered her basil, coriander, borage, parsley, sage and thyme amongst the young honeysuckle vines and ragweed.

(Steichen 1969, 70)



Figure 3.26 Doe Burial Ground near Spring Garden, c. 1950
Photographic Archives, #439-3

Helga grew strawberries on the slope west of the root cellar. Other berries planted there were blueberries and currants (Photo Archives, CARL). A few beehives were kept above the root cellar. These projects were temporary and early (circa 1950), not lasting for any length of time during the Sandburg period (Polega 1989a).

Management of the general area was minimal. Only the spring garden itself was ever maintained. The surrounding area was allowed to grow unchecked, becoming overgrown with shrubs, young hardwoods and vines, particularly honeysuckle. Aerial photographs indicate the spring garden area and the terraces above it were released early in the Sandburg period. By 1963, young second growth hardwoods had begun, and shrubs and forbs were well established. Late photographs (circa 1967) show a young successional understory of hickory, pine, oak, and possibly red maple in the spring garden area, see figure 3.3 (Photo Archives, CARL).

VEGETABLE GARDEN--The vegetable garden is bound by the back drive on the north and a fence to the south. A dirt road running through the garden to the apple orchard divides it into two sections.

The two small structures near the garden lane entrance were used by Paula Sandburg as isolation quarters for her goats. Later they were converted to buck houses. Their construction date is unknown.

Fences in this area include one bordering the north side of the garden along the back drive, the fencing of the pens of the two isolation/buck houses, and another marking the southern border of the garden. Part of the northern fence along the drive appears to have been removed by the Sandburgs (Photo Archives, CARL).

The Sandburgs had no use for the boxwood lining the vegetable garden (figure. 3.27). Many were dying, and several were given to Smyth relatives in the Flat Rock/Hendersonville area (Steichen 1969, 68). Those remaining were plowed under, so that by 1951 all but one had been removed, see figure 3.28. In addition to the single boxwood, a Chinese quince (*Pseudocydonia sinensis*) in the southern part of the garden, an apple tree, and a mimosa near the lane entrance survived.



Figure 3.27 Vegetable Garden Taken from Back Drive, c. 1950. Note fencing and boxwood hedge. Photographic Archives, #798



Figure 3.28 Paula Steichen Polega (behind the horse) at edge of Vegetable Garden, c. 1960. Photographic Archives, #103-10

Both sides of the lane were planted in vegetables. The garden had corn and oats for stock animals when they were on the farm (Polega in Photo Archives, CARL). Helga Sandburg's journal mentions squash, cucumbers, watermelon, gherkins, pumpkins, and melons (Steichen, 1969, 69). The farm office in the main house contains references to several types of vegetables ordered or staked in the vegetable garden. They included: Detroit dark red beets, icicle radishes, broccoli, orange pumpkins, New Zealand spinach, carrots, Bloomsdale spinach, and lima beans (farm office archives). A more complete list can be found in appendix L.

White pines lined the north edge of the garden from the lane entrance westward in 1951. By 1963, less than 50 percent of this group remained (Aerial Photographs). It is very likely the Chinese chestnut (*Castanea mollissima*) in one of the buck pens was planted during the Sandburg period.

FARM MANAGER'S HOUSE--The farm manager's house was occupied during the entire Sandburg period. After the Ballards, who occupied the house during the transition of ownership and the early Sandburg years, Frank Mintz and his family lived here. Leroy Levi later became herdsman and stayed in the house until the late 1960s.

Southeast of the house stood the ice house, in poor shape by 1945. It was removed by 1950; however, the pit was not filled until the NPS period, see figure 3.29 (Polega in Photo Archives, CARL). Other nearby structures included: the chicken house and pen, a woodshed, and a buck house farther to the north.

Aerial photos of the period indicate a heavy canopy, except for the immediate house area. The area north and east of the ice house appeared to have second growth hardwoods, with some larger species, including tulip poplars, white oaks, and red maples. Rhododendrons, young hardwood

trees, and some herbaceous species grew scattered about the grassy yard (figures 3.30 and 3.31). Next to the house were several roses-of-sharon (*Hibiscus syriacus*) and hostas (Bailey 1980, 43; Photo Archives, CARL; field observations).



Figure 3.29 Ice House, c. 1947
Photographic Archives, #391-1



Figure 3.30 Farm Manager's House and Surrounding Area, c. 1965
Photographic Archives, #113-22



Figure 3.31 Farm Manager's House and Surrounding Area, c. 1965
Photographic Archives, #100-1

White pines, hemlocks, and white oaks dominated the western-most part of this area. In addition, two large hardwood trees lined the edge of the drive above the farm manager's house (Photo Archives, CARL).

It appears from early photographs that the eastern half of the area was well into second growth hardwoods by 1945. There is no indication that the Sandburgs provoked any changes. The front of the house, however, was maintained in grass with occasional hardwood seedlings, and woody shrubs taking hold under a canopy of a few mature hardwoods and conifers. In all likelihood, grass was cut rather infrequently, allowing shade and autumn leaves to keep it down.

GOAT BARN--Only two new structures were added to the barn complex during the Sandburg period. These were the milk house, built in 1947, and a storage shed which appears by 1963 (aerial photograph interpretation). Changes to the barn area for goat accommodation were few. All existing fencing had been replaced with woven wire by 1950 (Photo Archives, CARL). It is not known if gates were replaced. In

addition, a wooden seesaw was added to the barn yard for the goats to play on.

The dominant landscape feature of this area was a very large American elm (*Ulmus americana*), which lived until the 1980s (figure 3.32). The tree provided shade for the animals and was much loved by family members. The stone work encircling the base of this elm may have come from foundation remains of a Smyth period farm structure. The stones were in place in the late 1940s and were probably there when the family arrived. Two salt blocks were kept on opposite sides of the elm tree (Photo Archives, CARL). To the south more shade was provided by four walnut trees.



Figure 3.32 Helga and Paula Sandburg in Barnyard with Chikaming Goats, c. 1965. Note elm tree. Photographic Archives, #1125-21

The entrance drive to the barn area remained the same throughout the Sandburg period. Crushed stone was laid at least once during this time. Barnyard grass grew five to seven inches before cutting, and the cowshed area was allowed to grow taller with grasses and forbs reaching two feet or so before being cut. Pastures near the barn also were not cut until the grass had grown tall (figures 3.33 and 3.34).



Figure 3.33 Barnyard, c. 1962. Note height of grasses at fence line.
Photographic Archives, #12905



Figure 3.34 Pasture Grasses Southwest of Goat Barn, c. 1960
Photographic Archives, #319-59

CHIKAMING GOAT HERD--The goats were a vital part of Connemara. Because of this herd, the resulting farm management created what we understand as the Carl Sandburg landscape. Arriving with approximately 150 goats, Helga and Paula Sandburg increased the numbers to around 300 by 1952 (Triggs 1989, 30), with decreasing numbers thereafter. In 1961 there were only seventy, including kids, and by 1967 only twenty-seven remained. That same year, Carl Sandburg died, and the remainder of the herd was sold (Triggs 1989, 33-34).

The barn area was the most active part of Connemara. Paula Sandburg sold milk to local dairies in between the buying and selling of kids, does, and bucks. Her greatest achievements, however, were through the successes of her breeding programs for her Toggenburg and Nubian goats. The Chikaming herd grew in recognition with continual first and second place official United States milk production records from 1954 to 1966 (Triggs 1989, 139). A world record for milk production was set by Chikaming Jennifer II in 1960.

Paula Sandburg was also an active member of several national and international dairy goat associations and shared her knowledge through numerous articles published in their respective journals. Triggs (1989) has found over thirty published articles by Mrs. Carl Sandburg during the period 1938-1965.

OTHER ANIMALS--Farm animals during the Sandburg period included cattle, horses, sheep, chickens, pigs, dogs, and cats. Approximately ten horses were pastured on the farm. During winter months, they were kept in stalls (Steichen 1969, 59).

APPLE ORCHARD (figure 3.38)--Little is known of the species of apples existing in the orchard during the historic period. Apples were not harvested. Paula Polega recalls that, as a child, she and other children had their own horse shows

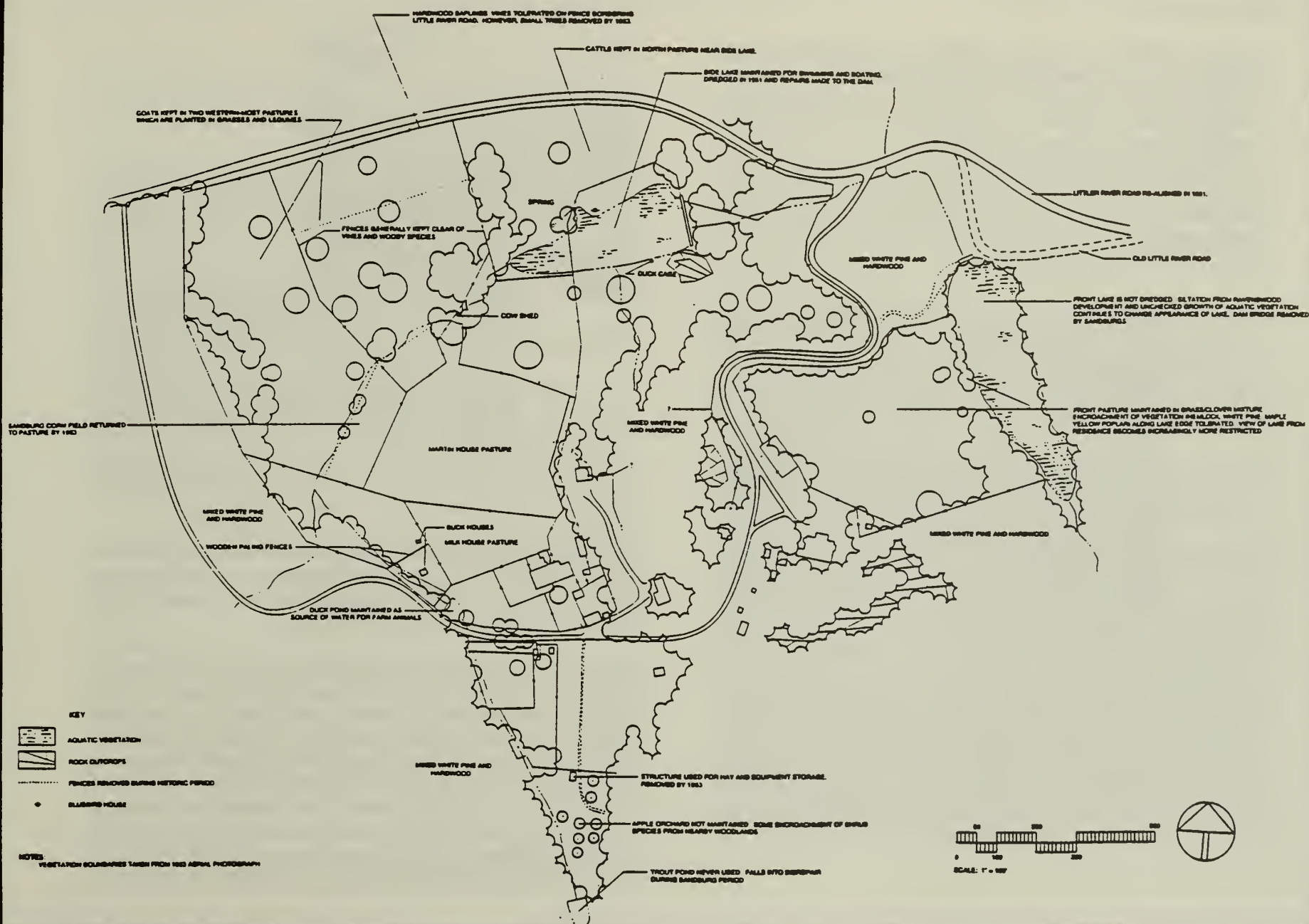


Figure 3.35 Lakes and Pastures--Sandburg Period

there, but that the area was not maintained well (Polega, 1989a). Aerial photographs from 1963 indicate encroachment from surrounding woodlands, indicating that the orchard may have been released to natural successional changes during the historic period.

Aerial photographs taken in 1951 show the location of a structure on the north edge of the apple orchard. John C. Steichen recalls this was a "pole barn used to store hay and equipment" (1990). The structure was removed sometime before 1963 (Aerial Photographs).

TROUT POND--The Sandburgs never used the trout pond and, consequently, never maintained it. From early in the historic period, structural integrity of the dam had been weakened, possibly from a tree fall. Little, if any, water was held by the dam, and vegetation quickly rooted and grew there (Steichen 1990).

DUCK POND--The duck pond was kept clean and served as a source of water for sheep and sometimes bucks. According to John Steichen, ducks were not kept there (1990).

PASTURES AND LAKES

FRONT LAKE AND PASTURE--The front Lake and pasture underwent changes necessary to accommodate the Sandburgs' needs. Woven wire fencing replaced much of the old Brinkerhoff twisted steel put in by Smyth, and the Sandburgs pastured their bucks, horses, and donkey, Piccolino, here (Crile 1991). Aerial photographs show little changes to the pasture; however, some encroachment of hardwoods and pines occurred along the western side of the lake, see figure 3.36. Clover was planted in the front pasture (Crile 1991) and was possibly mixed with grasses such as timothy or orchard grass.



Figure 3.36 View of Front Pasture and Front Lake, c. 1965
Photographic Archives, #1013-34

The lake was not dredged during the Sandburg occupancy. The development of Ravenwood Estates nearby, including another lake and dam upstream, accelerated deposits of silt on the southern end, and the lake became choked with vegetation. In addition, the family planted waterlilies (*Nymphaea* sp.), which quickly covered the surface.

Neglect was also evident in the treatment of the front lake dam. In the 1950s, the bridge lying across the spillway was removed. Later, in 1962, the stone supports for the bridge were also removed (Frasier 1981, 16).

SIDE LAKE AND PASTURE--Side pastures were utilized to accommodate the farm's different animals. Paula Sandburg put her goats in the two western-most pastures near side lake (figure 3.37). These were better pastures, planted in clover, alfalfa, and lespedeza (Crile 1991; Photographic Archives, CARL). To avoid overgrazing, the family alternated the pastures periodically, but not in increments long enough to encourage tall pasture growth. According to Helga Sandburg Crile (1991), both pastures were grazed down enough to remain relatively uniform in height. Photographs

taken in the mid to early 1960s, however, indicate that in some areas grasses were allowed to reach heights of ten to twelve inches. It is not known if this was typical of the later historic period, see figure 3.34.



Figure 3.37 Side Pastures and Corn Field, c. 1950
Photographic Archives, #448

In the summers, the goats took advantage of the shade afforded them from the trees located there. Paula Steichen wrote, "Along the glint of water, and in scattered groups throughout the fields, grew spreading oaks and pines under which the goats would gather in the heat of the day" (Steichen 1969, 31).

Cattle were kept in a pasture north of side lake near Little River Road (Photo Archives, CARL). The two Percherons, Pearl and Major, used in the early historic period to plow the vegetable garden, were also kept nearby in "low pastures" (Steichen 1969, 52). Helga Sandburg wrote that these pastures were planted in timothy or orchard grass (Crile 1991).

Fence lines remained constant throughout the historic period, with only minor changes. Aerial photographs show successional growth of hardwood saplings along the fence

row bordering Little River Road. The 1962 aerial photograph, however, reveals that these were removed leaving only vines to grow on the fence. All other fences appear to have been kept clean of vines or tree saplings.

Side Lake was used by the Sandburg children for boating, swimming, and raising ducks. Next to the rock outcrop near the south end of the dam, the Sandburgs dumped sand to create a beach on the edge of the lake. Helga settled a flock of ducks to the west of this beach and had a duck cage built to protect them from predatory animals, see figure 3.38 (Fraizer 1981, 29).



Figure 3.38 Side Pasture and Side Lake, c. 1965
Photographic Archives, #1127-23

In 1961, the Freeman Construction Company was hired to drain and dredge Side Lake. Repairs were made on the dam, which included new capping stones, a concrete deck, and a floating driving platform. About this time the Sandburgs planted a privet hedge to provide more privacy from Little River Road when the children swam and boated on the lake (Frasier 1981, 17).

TRAILS AND WOODLANDS--The Memminger Trail and Big Glassy Trail were enjoyed by all members of the family. Family walks were common during the daytime and evening hours. Leaves, nuts, berries, and other natural objects were collected and brought into the house. It is not known if the trails were ever cleared or maintained during the historic period, other than the occasional removal of branches or small trees that might have fallen over the paths.

Woodlands during the historic period were used only for the recreational purposes of hiking, collecting of seeds, leaves and other natural objects of interest, and viewing wildflowers. In *My Connemara*, Paula Steichen Polega wrote of crested iris and columbine (Steichen 1969, 66). A scrapbook of pressed flowers kept by Margaret Sandburg around 1946 included: trailing arbutus (*Epigaea repens*), bluets (*Hedysotis caerulea*), spearleaved violet (*Viola hastata*), firepink (*Silene virginica*), and Indian pipe (*Monotropa uniflora*), among others (Farm Archives, CARL). A complete list of flowers from this source can be found in appendix O.

In an early letter, Paula Sandburg describes her walks on Connemara's trails through woods of oak, black gum, yellow pine, white pine, hickory, and dogwood (Excerpts of letter printed in Steichen 1969, 12). Woodland boundaries changed gradually during the historic period as evidenced from aerial photographs. Encroachment proceeded along the vegetable garden's eastern boundary and upon all sides of rock outcrops located within these woods.

MOUNTAIN RESERVOIR--The mountain reservoir was a source of water to the main house in case of fire. John Steichen (1990) writes that a valve at the bottom of the stairs in the main house could redirect the water source from the spring to the reservoir if necessary. Every few years, the reservoir was cleaned out of sediment and leaves. A drag pan and oxen were used in the early years and the jeep winch in later years (Steichen 1990).

VIEWS--"From the top of Big Glassy you see all over Hendersonville and the country all about, Smokies, Blue Ridge--a far wider view than from our porch--and in every direction as you are 'on top of the world'!" Paula Sandburg wrote to her daughter, Helga, during the move in 1945 (Steichen 1969, 10). The view from atop Big Glassy was enjoyed throughout the Sandburg period.

From the front porch, the family enjoyed two views--one of Front Lake below, partially hidden by encroaching vegetation on either side of the pasture, and the longer view of the Blue Ridge Mountains stretching northward into the distance (figure 3.38). Paula Steichen (Polega) writes that the purchase of Connemara "was decided when [my grandfather] stepped onto the front porch and looked past pillars to the distant dusky-blue hills. He put his hand on the porch railing and declared that "Connemara would be the new home" (Steichen 1969, 10). Another comment from Paula Sandburg emphasized the importance of this view, "We didn't just buy two-hundred and forty-five acres when we bought Connemara, we bought a million acres of sky, too!" (Steichen 1969, 101). Much family time was spent on this porch. Many times Carl Sandburg did his reading here. Paula Sandburg emphasized the importance of the view by adding in the foreground her dahlias and zinnias on the front yard fence line.

Other views experienced by family members would have been the partial view of the house from Little River Road before its realignment in 1962. Trees on the north side of the lake would have afforded passersby a filtered view of the lake, pasture, and house above. Another view of the estate was experienced further west along Little River Road looking southward toward the pastures and barn.

Finally, a view of nearby hills could be enjoyed from the rock outcrop behind the main house. Although continually closing in, this narrow glimpse of the trees on the Ravenwood estate was probably enjoyed by Carl Sandburg as he sat out on the rock to read and write.

ROCK OUTCROPS--Of the many outcroppings present in the Connemara landscape, one carries particular significance in the history of the site. The large rock behind the main house was a place frequented by Carl Sandburg (figure 3.39). Paula Steichen recalled a special moment in her childhood as follows:

To our right, beyond the pathway, beyond the hemlocks, beyond our sight, but within hearing of our song and voices, sits my grandfather in his chair that stays on the overlying granite rock at the edge of the woods. He has been there, beneath the sun, working, all afternoon. His shirt collar is turned under and is opened at the neck. There is a dark V of tanned skin there, for he often works outdoors in the afternoons, as he has throughout his lifetime. In the heat of mid-summer one will find him there, also, too involved in his work to move to a shaded spot, his shirt off, his green, newspaperman's visor on, a cigar stub, unlit, between his teeth.

(Steichen in NPS 1982, 14)

The surrounding woods continued their slow encroachment upon the outcrop over the twenty-two year period. Sandburg's chair, a hand made willow chair, can be seen in figure 3.40.

The rock outcrop atop Big Glassy Mountain is discussed above in the section entitled Views. The outcrop located near the upper entry drive, north of the tenant house, is also discussed above in the section entitled Entry Drive.



Figure 3.39 Rock Outcrop behind Residence, c. 1967
Photographic Archives, #698-98



Figure 3.40 Carl Sandburg's Cane Chair on Rock Outcrop behind Residence, c. 1965. Photographic Archives, #654-1

THE SANDBURG PHILOSOPHY

The Sandburg home was not the carefully managed landscape of its previous steward. Carl Sandburg participated as an observer in the Connemara landscape, and his wife Paula, who took an active role in the management of the farm, placed her priorities on the Chikaming herd and its supporting structures and landscape features. Paula Sandburg used her free time and occasional spare help to "catch up" on the other details of management at Connemara. Pruning, mowing, weeding, and the removal of dead trees and branches were eventually tended to, but only after goat management permitted.

As a result, grass grew tall in the front yard and in the pastures. Shrubbery was allowed to grow straggly before being pruned. Driveways were not cleared of fallen leaves. Vines were permitted to grow on the side of the house and over most fences. Some areas were released to natural succession.

The lack of time and help may have initiated the Sandburgs' love of things in their natural state. Several accounts from family members indicate their encouragement of shrubs, trees, and groundcovers to grow freely and naturally. Helga Sandburg recalls the family's arrival in 1945, "The Smyths couldn't sell [the house] for almost three years. So, things that had been a certain way had grown by the time we were there, which I loved. The overgrown, the mysterious look of it all was wonderful" (Crile 1989). Paula Steichen Polega expresses the same appreciation for this type of visual landscape in *My Connemara*--"...I know that [my grandparents] regarded nature in her continual change as somehow speaking of the potential in all forms of life" (Steichen 1969, 98). A love of the whole, of the process, was also evident in Sandburg's relationship with Paula when he wrote her, "I love you not for what you are, nor for what you

have been, nor for what you are going to be, but for all three" (Steichen 1969, 98).

This philosophy coupled with the reality of the lack of manpower and time transformed Connemara into a wilder, unkempt landscape. The family's consent to natural changes was the most influential factor affecting the landscape. Nonetheless, varying tolerances for these natural processes dictated how far these changes were allowed to progress. As expected, the least tolerance for change was for landscapes associated with goats. Helga Sandburg explained,

. . .the goats were the main project, . . . that was mother's love. And the flowers were something that she just enjoyed. But the goats were like her *raison d'être*. It was important that they make records and that [the goats] get the best care.

(Crile 1989)

Goat pastures and the barn area changed very little, but a greater variety of changes in other areas of the farm created a multitude of constantly changing landscapes. These patterns occurring throughout the historic period formed the Connemara that Carl Sandburg knew.

CHANGES IN THE SANDBURG LANDSCAPE

Types of change during the Sandburg occupancy can be categorized into two types, man-made and natural. Natural changes are defined in terms of 1) natural succession resulting from a release or hands off policy and 2) losses of vegetation due to natural causes. The release policy is one of allowing natural successional processes to take place and occur at the woodland edge of the spring garden and nearby terraces and around the rock outcrop near the summer garden. These processes were slow transformations of

grassland to shrubland/early hardwood seres. Other natural changes occur through the encroachment of woodland mosses, shrubs, and trees onto the rock outcrop behind the house.

Losses due to disease, lightning strikes, and aging were an additional type of natural change. Documentation of losses around the house is confined to specific shrubs, and significant losses appear to have occurred during the late historic period. These include three large rose-of-sharon in the front lawn, a rose in the center of the old carriage turnaround on the east side of the house, and various shrubs in the north foundation bed. Other losses, occurring throughout the historic period, include white pine along the entry drive and back drive.

Man-made changes occurred in areas used by the family and can be divided into two types: 1) removal and replanting of vegetation and 2) additions of new plantings. Removal and replanting were carried out at varying frequencies depending on the desire or need for replanting. These areas included all foundation beds, the lily garden, dahlia/zinnia bed, the front yard fence line, the summer garden, and the vegetable garden. Changes occurred either seasonally or periodically throughout the Sandburg period.

The addition of plantings occurred as a result of various gifts of plants or the Sandburgs' desire to change the face of a particular area. In the case of the entry drive, the addition of hemlock to the line of white pine was done to reinforce the original design. Other areas changed because of the additions of plantings, such as the magnolia/ginkgo area west of the house, the area of flowering trees between the summer garden and the front yard, the bird-feeding area, and the gate area of the kid goat pen south of the family garage.

CHAPTER FOUR

INTEGRITY

Integrity is determined by comparing the present state of a landscape with its physical characteristics during the historic period. The National Register of Historic Places defines historic integrity as the "composite effect of seven qualities present within the landscape--location, design, setting, materials, workmanship, feeling, and association" (McClelland and others, 21).

Ian Firth (1985) has adapted these criteria for biotic cultural resources. His modification replaces material, design and workmanship with species composition, community organization, and management techniques. Such shifts in focus allow for species maturation, natural succession, and an understanding of landscape character resulting from management techniques.

An evaluation of the integrity of a historic landscape is necessary to determine whether or not it retains enough of the important physical characteristics of the historic period to convey the site's significance (Melnick 1984, 39). In the case of landscapes associated with historic persons, each landscape feature often has more or less equal significance; thus, the whole, or the landscape in its entirety, elicits the feeling associated with the historic scene (Firth 1985, 21).

Firth (1985) defines feeling as "the ability of a cultural resource to evoke a sense of the past." This includes sounds and smells as well as views. Particularly important is biological rhythms--diurnal, monthly, and seasonal--which can express times past most strongly. An evaluation of integrity through feeling is based on the first five

criteria--location, species composition, community organization, management techniques, and setting, see appendix A for definitions of these terms (Firth 1985, 14).

In the case of Connemara, Carl Sandburg experienced his home as an observer. Specifically, he experienced the sights, smells, and sounds of the goats and their associated landscapes, the colors of nature expressed seasonally in the family's flower gardens and flowering shrubs and trees planted by his wife, and the views of distant mountains from the front porch and atop Big Glassy Mountain. But more importantly, he experienced a kaleidoscope of impressions of Connemara at that time. He shared the family's love for wildness and nature's patterns of change and succession. The relaxed maintenance of the farm resulted in a constantly changing landscape during the historic period. These changes became the important characteristics of Connemara's historic landscape.

This chapter evaluates the existing Connemara landscape according to the five characteristics defining feeling listed above. A discussion of general changes is presented and followed by an area by area evaluation.

GENERAL CHANGES

After acquisition in 1969, NPS priorities for the site brought about general changes. Preparations were made for public visitation, and the park opened in May 1974. Throughout the 1970s and early 1980s, these changes reflected the

following priorities:

1. Stabilization of structures--including historic buildings, retaining walls, fences, and dams. All buildings and structures received some restoration work; a few were completely reconstructed.
2. Visitor circulation--including parking, shuttle services, roads, and trails.
3. Visitor interpretation--including a visitor center, amphitheater, house tours, and a "living farm" concept to recreate the historic scene.
4. Landscape management objectives--including a program to "preserve and perpetuate the landscape as Carl Sandburg knew it" (NPS 1971, 20). Preserving the Carl Sandburg landscape was interpreted as a cleaning up effort, especially in areas overgrown with successional shrub and hardwood species. The farm underwent a face-lift, as management techniques were defined by general NPS landscape maintenance policies. The results were a cleaner, more refined, park-like setting than Connemara had ever had since the Sandburg purchase in 1945. Present NPS maintenance is a continuation of this policy.

General changes to the natural environment have been few in the short elapse of time since the relatively recent historic period, which allowed for only some successional differences. Most important has been the recent occurrence of dogwood anthracnose (*Discula sp.*) attacking a majority of dogwood on the site. Also an invasion of privet (*Ligustrum vulgare*) and honeysuckle (*Lonicera japonica*) threaten the diversity of natural vegetation in certain parts of the farm.

ENTRY DRIVE (figure 4.1)--The location and design of the entry drive remain true to the historic period. Although the allee of white pines continues to decline, Paula Sandburg's hemlock (approximately eighty) have matured and now strongly reinforce the original design of a tree-lined drive. The NPS, forced to remove some of the pines which were diseased or damaged by ice or lightning, has filled some gaps with saplings of white pine and hemlock. Of the original pines planted by Memminger, approximately 30 percent remain. Dogwoods (*Cornus florida*) growing along the drive show signs of possible anthracnose infection. The NPS has recently begun benomyl spraying on selected trees to counteract the effects of the fungus.



Figure 4.1 Entry Drive, 1990
Photograph by author

Fencing and retaining walls along the drive remain in their historic locations. Most fencing was reconstructed and retaining walls received some restoration work. Vines and other grasses and forbs are tolerated on and around the fences and hemlocks near them. Ivy is allowed to grow on tree trunks, but not over retaining walls. Grass on the edges of the drive is kept short.

One may enter through the historic entrance by foot today. Minor repairs to the pillars and walls were done during the 1970s. Ivy is allowed to grow over the stone work, which preserves the historic feeling of this part of the landscape (figure 4.2).



Figure 4.2 Historic Entrance, 1990
Photograph taken by author

The rock outcrop area across from the summer garden was cleared of all existing successional species during the 1970s (Hamn 1989). The fence alongside this part of the entrance drive was removed, and the historic drainage ditches were reconstructed in 1979 (Ward 1989). The area

is now kept in grass and mowed every two weeks in summer (figure 4.3).



Figure 4.3 Rock Outcrop near Upper Entry Drive, 1990
Photograph by author

The upper entry drive closest to the house retains much of its historic vegetation (figure 4.4). The American hollies, American elms, Japanese maples, and remaining boxwood continue to contribute to the setting of the Sandburg home. Treatment of this area consists of keeping ground covers clear of debris and the grass mowed often, again resulting in a clean park-like setting.

The survival of landscape features along the entry drive preserved its historic integrity. This includes historic vegetation, design, fences, and retaining walls. Although species composition is undergoing a successional change as white pine continue to die out and the hemlock mature, the design of the tree-lined drive is strong. Combined, these elements contribute to the feeling of linking this landscape with its past.



Figure 4.4 Upper Entry Drive near Residence, 1990
Photograph by author

Compromises to feeling are found in present management techniques, which result in a cleaner and more polished entry drive. Vegetation is managed more carefully than in the Sandburg period, a policy most evident in the treatment of forbs, grasses, and vines. Fallen branches and leaves are removed from the drive's edges, and the rock outcrop area along the upper entry drive is maintained by mowing every two weeks in the summer.

BACK DRIVE TO BARN AREA (figure 4.5)--The loss of white pine and other large trees lining this part of the back drive has continued since 1969. Several hemlock and white pine were removed in front of the tenant house and across the drive near the Swedish house (Hamn 1989; Photo Archives, CARL). Reasons for their removal are unknown, however,

the protection of historic structures was probably the motivation. Several dogwood trees have contracted the anthracnose fungus. Selected ones are sprayed with a benomyl solution periodically to counteract effects.

The boxwood hedge and retaining wall are important features of the Sandburg landscape. Maintenance of the wall involves only minor repairs. However, the western most part of the wall, beyond the boxwood to the entrance lane of the vegetable garden, appears to be of NPS construction.



Figure 4.5 Back Drive Leading to Barn, 1990
Photograph by author

Boxwood along the retaining wall are not trimmed, resulting in the loose, shrubby character typical of the historic period. Forbs and grasses along the drive edges are mowed often, and fall leaves are removed from the drive. Crushed stone is relaid every two to three years.

The feeling associated with this part of the back drive is somewhat compromised because of the loss of large conifers that once stood near the tenant house and Swedish house. In addition, present management policies do not allow for the growth of weeds and other forbs along the edges of the drive, but keep them closely cropped and neat. None of the untidiness indicative of the Sandburgs's management is observed.

The location and materials of the drive, including those of the retaining walls, remain true to the historic period, including retaining walls. Although recently built, the retaining wall extension fits into the historic scene visually.

SUMMER GARDEN--The location of the summer garden has not changed from Sandburg days, and the enclosing chain link fence is historic. Fencing on the pasture side was removed and replaced with metal posts and woven wire. It is not known if metal posts were used during the Sandburg period. The setting of this garden has changed because of the loss of large white pines in and near the garden entrance, although dates of their demise are unknown. The summer house, or gazebo, was restored by the NPS (figure 4.6).

Almost all of the historic vegetation of the summer garden has been lost. Survivors include the roses, dogwoods, American hollies, periwinkle, honeysuckle, privet, foxgloves, and some daffodils. Honeysuckle continues to grow freely on the chain link fence.

A restoration effort was initiated in the summer of 1989 by Friends of Connemara, a local volunteers group. Donations of plant material and time volunteered has resulted in one third of the garden being replanted so far. The group uses Margaret Sandburg's drawing as a guide for planting.

Because of the amount of historic plant material lost, historic integrity of the summer garden has been compromised. The partial restoration of the garden has helped alleviate the severity of this loss, and the disarrayed

growth of honeysuckle on the enclosing fence exhibits some of the unpolished feeling of the garden from the outside. Nonetheless, the obvious lack of a fully planted garden damages the feeling associated with the past.



Figure 4.6 Summer House near Summer Garden, 1990
Photograph by author

MAIN HOUSE, NORTH SIDE--Integrity is strengthened here by the existence of much of the historic vegetation, and the survival in their original locations of fences, the fountain pool, and the drive around the house. Foundation plantings consist of many overgrown plants. Azaleas, rhododendron, and conical arborvitae are now taller and leggier than they were during the historic period. In contrast, the bridalwreath spirea and abelia are pruned and kept smaller and neater than they were historically, see figure 4.7 (Ducker 1989).

Shrubbery in the front lawn receives annual pruning and fertilizing. Grass is fertilized annually and cut every two weeks (Boykdn 1975; Ducker 1989). The dahlia/zinnia bed

was restored by NPS, whose personnel plant dahlias, zinnias, and marigolds annually. Plant materials are bought locally, see figure 4.8 (Freeman 1990).



Figure 4.7 North Foundation Plantings, 1990
Photograph by author

The association with the Sandburg period can be strongly felt in the area north of the main house. Most of the historic vegetation is intact, and the location of structural features such as fences, the fountain pool, and the drive around the house has not changed. The NPS keeps the shrubbery and grass clipped somewhat neater than was done historically, and the decline of several shrubs has changed the character of the front of the house. Nonetheless, integrity is, for the most part, preserved.

MAIN HOUSE, EAST SIDE--The east side of the house still retains most of its historic integrity despite a loss of historic

vegetation and the insertion of a non-historic structure near the core area. In the 1970s, an outdoor amphitheater was constructed to provide a place for performances of Carl Sandburg's work by the Vagabond Players of the Flat Rock Playhouse. Many hundreds of visitors attend the performances given daily during the summer. Soil compaction and some erosion create an unsightly arena visible from this side of the house.



Figure 4.8 Front Lawn Showing Part of Dahlia/Zinnia Bed and Fence Line Plantings, 1990. Photograph by author.

In siting the amphitheater, a circle of low-growing boxwood shrubs, a remnant of the Smyth period, which remained throughout the Sandburg period, was removed to provide access. Of the original Smyth boxwood shrubs planted here, only three remain.

Other existing historic vegetation includes the arc of columnar arborvitae defining the location of the carriage turnaround. Foundation plantings have diminished to only a few nandinas, an acuba, iris, aster (possibly *A. Tataricus*), and wild potato vines (*Ipomea sp.*), see figure 4.9. The lily

bed was partially restored by the NPS. Existing plant materials, however, do not provide continuous bloom and a variety of color throughout summer. Daylilies are the dominant planting, with some chrysanthemum, petunia, crocus, garden phlox, impatiens, cockscomb, marigolds, candytuft, Pacific Giant delphinium, and garden balsam. Lilies and Connecticut Yankee Blue delphiniums have not been added (figure 4.10).



Figure 4.9 East Foundation Bed, 1990
Photograph by author

Locations of flower beds, lawn edges, and most historic plant material are clearly defined here. Some compromises in integrity were made with the loss of plant material in the foundation bed and the lack of variety of color and bloom time in the lily bed. The insertion of an amphitheater and the removal of historic boxwood shrubs also diminish its integrity.

One experiences Paula Sandburg's love of flowers to some degree with the existing lily bed. However, an appreciation of abundant overgrowth exemplified in the foundation bed

is absent. The lawn is kept shorter than in the historic period, which also contributes to a loss of the true feeling associated with the Sandburg landscape.



Figure 4.10 Lily Garden, 1990
Photograph by author

MAIN HOUSE, SOUTH SIDE--The foundation bed, retaining wall, bird feeders, and historic vegetation preserve the historic integrity of this side of the house. Foundation plantings consist of survivors of a late planting by Paula Sandburg, including rose-of-sharon, nandina, rhododendron, native azalea, mahonia, English ivy, leucojum, periwinkle, and daylilies. The other flowering perennials known to have been planted here died out. Management consists of light pruning and mowing to keep down weeds (figure 4.11).

Edges of the drive are mowed with the same frequency as the lawn; thus, the historic untidiness of taller grasses and

forbs here and above the retaining wall is absent. Only two freestanding bird feeders remain.



Figure 4.11 South Foundation Bed, 1990
Photograph by author

Several large white pines were removed for the protection of the house (Hamn 1989). Rhododendrons and native azaleas nearby have grown to large proportions, increasing the density of the understory. At the western-most edge of the retaining wall, periwinkle and English ivy keep out invasives, resulting in a clean and lush character.

The feeling associated with this part of the present Sandburg landscape is one of a clean and well managed area. Present NPS management keeps grass cut short and allows shrubs to provide a rich lushness to the area above the retaining wall. The coarse, untidy look of the Sandburg period is prevented by these management techniques.

MAIN HOUSE, WEST SIDE--Historic integrity has been preserved in this area west of the main house. Changes in character can be observed in the aging of some plant material, and some small losses of historic vegetation. For example, the star magnolia is declining, as is the southern magnolia, which fortunately has an offspring from a rooted branch. A tall white pine near the carport was removed. The ginkgo, American hollies, lilacs, hydrangea, flowering quince, forsythia, and nandina survived, and the large American boxwood shrubs rejuvenated after a severe pruning in the 1970s (Hamn 1989). The low box hedge (*Buxus sp.*) was removed from the edge of the drive. The trumpet vines were also removed when city water lines were laid into the house (figure 4.12).



Figure 4.12 West Side of House and Carport, 1990
Photograph by author

Grass in the area is clipped every two weeks. The bamboo continues to confine itself to its historic boundaries. Hemlock nearby have matured, producing more shade than existed during the historic period.

The foundation bed next to the house consists of grass and a small planting of red salvia. A small clump of daylilies grow around an NPS sign directing people to the house basement for tours. In the spring of 1989, a painting contract for the main house resulted in the removal of all vines growing on the house foundation.

Much of this area historically described as lush, yet maintained, continues to exhibit the same character. Although many of the shrubs are over mature and nearby hemlocks produce more shade, the existence of much of the original plantings maintains the feeling associated with the past.

CHICKEN HOUSE AND SURROUNDING AREA--This area includes the family garage, the Swedish house, the chicken house, the pump house, the spring house, and the woodshed. The maintenance of these buildings and the fences connecting them has aided in the preservation of its historic integrity. Only the woodshed retains its original function by storing unused Sandburg items, such as the dismantled fountain. The other structures are used for interpretive purposes, except for the chicken house, which is not open to the public.

Vegetation is managed in different ways. The goat/chicken pen is maintained by mowing twice a month in the summer, whereas the pump house area is allowed to become overgrown with woody and herbaceous species. Fences are treated differently--those surrounding the pump house pen are covered in Ipomea and honeysuckle, and those of the goat/chicken pen contain few or no vines (figure 4.13).

Double fencing at the kid goat gate was removed or replaced with single woven wire. Vegetation removed near

this gate includes rose-of-sharon and a small evergreen. The large viburnum inside the kid goat pen survives today; however, the tall pear immediately west of the chicken house died and was removed. Also lost was a trumpet vine on the fence between the garage and Swedish house (Hamn 1989).



Figure 4.13 Kid Goat Pen, 1990
Photograph by author

The southern half of this area retains much of the typical character of the Sandburg landscape, overgrown and neglected. The feeling evoked from the sight of fences overgrown with vines and an unused pen rampant with weeds reinforces its integrity (figure 4.14). However, the kid goat/chicken pen area does not evoke the same feeling. A particularly damaging factor is the lack of vines on fences and the manicured "lawn" inside the pen.



Figure 4.14 View of Spring House with Overgrown Area around Pump House to the right, 1990. Photograph by author.

TENANT HOUSE (figure 4.15)--The tenant house has received restoration treatment and presently contains the park's historic archives. It is not open to the public. The location of a temporary comfort station nearby introduced a non-compatible structure into the historic core area. Although partially screened by tall rhododendron, it still conspicuously greets visitors on their way to the barn area from the entry drive.

Because of the removal of several hemlock along the back drive, this area is now much sunnier than it was historically. Grass is mowed twice a month in the summer. South and east of the house, second growth hardwood trees continue to mature and shade the area between the tenant house and the farm manager's house.

Association with the historic scene was compromised with the intrusion of the comfort station. The loss of the large hemlocks and the lawn of cut grass diminish the feeling of the unpolished historic scene.



Figure 4.15 Tenant House, 1990
Photograph by author

SPRING GARDEN (figure 4.16)--Very little remains of the spring garden area as experienced by the Sandburgs during the historic period. By 1970, the area was covered with successional shrubs and hardwood saplings. Because the Sandburgs had maintained only the "garden" area of flowering shrubs and bulbs--releasing all areas around it to natural successional growth--the area was, by 1970, well into early stages of second growth hardwood. By 1973, it had been completely cleared of successional growth, except for some flowering shrubs. Boxwood shrubs defining the doe burial ground were removed (aerial photos; Photo Archives, CARL). Presently, only one flowering quince and the boxwood lining the back drive remain. The spring garden is now grassed and mowed twice a month. Each spring only a few daffodils come up.



Figure 4.16 Spring Garden, 1990
Photograph by author

Historic buildings and structures in the area include the greenhouse, reconstructed in the 1970s, Helga Sandburg's beehives, and the Sandburg water storage tank. The NPS added three 1500-gallon water storage tanks to accommodate visitor demand (Hamn 1989; Weber 1989). What fencing remained during the Sandburg period was removed in the 1970s, and the wooden gate, removed during the Sandburg period, was replaced. Recently, the wooden posts of this gate fell into disrepair and were removed. No gate presently stands at this entrance to the spring garden.

The terraced area above the spring garden continued in successional growth. Yellow poplars, red maples, vacciniums, and some mountain laurels dominate. The spring garden exhibits only part of its historic connection with the Sandburg landscape. Only the structures, one historic shrub, and the single row of boxwood lining the back drive survive. The loss of historic vegetation and

fences and the emptiness of the existing park-like setting greatly diminish the feeling associated with the past.

VEGETABLE GARDEN (figure 4.17)--Vegetable garden boundaries are clearly defined on three sides and have changed little. The NPS at one time allowed park personnel to manage their own vegetable plots, and all of the garden was planted (Weber 1989). Today a smaller garden, approximately twenty-five feet by seventy feet, is maintained, and produce is set out daily for visitors to take home. The existing tall fescue was put down in the 1970s and is mowed three or four times a year.



Figure 4.17 Vegetable Garden, 1990
Photograph taken from south edge by author

Fences south and west of the garden and enclosing the buck pens survive in their original locations. Of the two small structures used as buck houses during the Sandburg

period, only one is used today (figure 4.18). Surviving vegetation from the historic period includes the Chinese quince, a large boxwood near the south edge, the Chinese chestnut, and an apple tree near the lane entrance.



Figure 4.18 Buck Houses near Vegetable Garden, 1990
Photograph by author

The dirt lane dividing the garden is maintained for access to the orchard and trout pond. Ditches on both sides were installed by maintenance staff in the 1970s (Ducker 1989).

Although the area presently gardened represents a small portion of the original plot, the seasonal effect of plowing, planting, and harvesting is still observed. With boundaries clearly defined, this area of Connemara exhibits a strong association with its past.

FARM MANAGER'S HOUSE (figure 4.19)--The farm manager's house received restoration work in the 1970s and is presently used as the park office. To accommodate this new use, certain changes were necessary. These include a slate walkway, stone retaining walls and drainage ditches, and a ten car staff parking area.



Figure 4.19 Farm Manager's House (Present Park Office), 1990
Photograph by author

Since 1970, the yard of the farm manager's house has undergone changes. Several small trees and shrubs were removed in a general "cleaning up" process. The surrounding canopy of hardwoods was altered with the complete clearing of an area immediately east and southeast of the house. This has resulted in a sunnier, more open look than existed historically. Recently, the NPS has

planted white pine and white oak in an attempt to restore some of the lost canopy.

Near the house, the rose-of-sharon shrubs have been declining over the years. Several hosta beds remain from the historic period, and the chicken pen is now overgrown with rose-of-sharon, jewel weed, common privet, and honeysuckle vines. The ice pit was filled with crushed stone.

The western portion of the front yard exhibits much of the character of the historic past. Large white pine and white oak cover the ground with heavy shade.

The loss of shade to the east of the farm manager's house diminishes the historic feeling of the area. The encroachment of second growth hardwood from the tenant house over to the ice pit was halted by replacement with grass. Again, the area has a clean, park-like setting not typical of the historic period.

However, other surviving features contribute to the feeling associated with the Sandburg landscape. They include all structures and, especially, the large trees on the western side of the front yard. Only the loss of shade and present management techniques compromise the feeling and character associated with the past.

GOAT BARN (figure 4.20)--Many of the historic structures in the goat barn area received restoration work during the 1970s. No changes in the location of structures and fences is indicated, except for the removal of two salt blocks placed near the elm tree during the Sandburg years.

During the NPS period the use of some structures changed. This includes the cow shed now being used to house chickens. The horse stalls of the main barn are now used for storage of old equipment. The milk house is presently not used. The barn garage was used as a park maintenance facility as late as 1980 until a new facility was built near the back drive entrance. Today farm machinery

has been returned to the barn garage, and it is an open exhibit for visitor interpretation.



Figure 4.20 Goat Barn, 1990
Photograph by author

The NPS manages the grass in the barnyard and nearby pastures by keeping it shorter than it was during the historic period. The greatest change, however, occurred with the loss of the large American elm in front of the barn. The loss of this tree and the shade it provided has been significant. Today, existing walnut trees continue to shade the southern half of the barnyard. The small drive through the barnyard is maintained with periodical relaying of crushed white limestone.

Early NPS management of Connemara was developed under the "living farm" concept. Approximately thirty descendants of the Chikaming herd were purchased and housed in the barn. Baby goats followed the housing sequence from the basement of the main house to the goat side of the chicken house to the barn (Hamn 1989; NPS 1971, 32). Horses, chickens, and ducks were also kept in

the barn area. This policy quickly proved to be expensive, lasting only about a year.

The present policy consists of managing a smaller number of goats, approximately sixteen, and keeping only chickens and a few cats. Present interpretive programs for the goat barn includes brief tours with NPS staff, a milking demonstration, a cheese-making demonstration, and photographs and posters on the interior walls of the barn. Of the three breeds kept today at Connemara, only the Toggenburg and Nubian goats are Chikaming descendants. (figure 4.21)



Figure 4.21 Descendants of Chikaming Herd, 1990
Photograph by author

Goats are managed in a fashion similar to that of the historic period. They are fed separately, wear collars bearing their names, and are put to pasture when weather permits. The kids especially contribute their playfulness, thus exhibiting the endearing qualities which so captured the Sandburg family.

The feeling associated with the Sandburg past is strengthened in the goat barn area by the existence of all the historic structures, fences, and although smaller in number, goats that are representative of the Chikaming herd. Interpretive activities contribute to an understanding of the historic scene. The loss of the elm tree, a vital part of this area of the Sandburg landscape is the major diminishing factor.

APPLE ORCHARD--Only one of the original apple trees still stands in the orchard today. In the mid-1970s, a mixture of varieties of apple were planted to restore this area. Three rows of trees, including Golden Delicious and Red Delicious among others, now stand. The groundcover is fescue and is maintained similarly to the vegetable garden--mowed two to three times annually. (Ducker 1989)

Overall the orchard maintains a clean, well-managed look. The restoration of the orchard has maintained integrity; however, management techniques compromise historic feeling. The orchard historically was not regularly maintained, resulting in tall grasses and a more unkempt visual quality than exists today.

TROUT POND--The trout pond was in complete disrepair by 1970 and was not restored and refilled with water until the 1980s. The visual quality of the past, the feeling of wildness and successional change exhibited in the disrepair of this feature during the historic period is no longer evident. Trees and other vegetation have been removed, and the pond is periodically cleaned out. Today it is used as an additional water supply for fires (Weber 1990).

DUCK POND--Some repair work was done on the duck pond dam during the 1970s. Since then, the pond has been cleaned out periodically. Today it maintains its historic integrity as a functional part of the Sandburg landscape.

PASTURES AND LAKES

Front Lake and Pasture--By the mid 1970s, front lake had become severely overgrown with pond weeds, and the dam suffered from leaking and overgrown vegetation. These problems were corrected around 1981 with the dredging of the lake and the repair of the dam. In addition, a footbridge was constructed over the spillway, and a footpath was added around the lake for visitors to enjoy.

Today the Park Service directs visitors on site via a parking lot, installed in 1980, just north of the lake. The visitors' center, front lake, and partial view of the house provide essential orientation as one enters the site. Visitors walk across the spillway and either walk up the drive via foot paths or await a shuttle bus which carries them. These new features were carefully sited and cannot be seen from the main house or from Little River Road, see figure 1.2.

Front pasture today is leased for grazing. One or two horses remain in this pasture year-round, and the leasee agrees to mow and fertilize on a regular basis. Grasses consist of a mixture of fescue, orchard grass, and clover, although much of it has been crowded out. Some encroachment of woodlands from both the north and south edges of the lake have changed the eastern boundary of the pasture to some degree, see figure 4.22.

Integrity of front lake and pasture, however, is strong as existing vegetation, fence lines, and land use contribute to the feeling associated with the historic period. The lake, although cleaner, still retains much of its "neglected" character with the encroachment of shrubs and young trees along its edges and the reintroduction of waterlilies on the northern end.



Figure 4.22 Front Pasture and Front Lake, 1991
Photograph by author

Side Lake and Pastures--Restoration work was also completed at side lake and dam in the early 1980s. The dam was repaired for leakage, overgrown vegetation was removed, and the lake was dredged. In the winter of 1990, dredging was repeated. Today parrot-feather milfoil (*Myriophyllum* sp.) continues to invade the lake and must be kept in check on a regular basis (figure 4.23).

Most of the shrubby vegetation overgrowing the north bank from the 1970s was removed; however, large dead trees have been left for aesthetic purposes. On the south bank, the duck cage remains in its original location. The

Sandburg "beach" no longer shows evidence of sand, but the location is obvious.



Figure 4.23 Side Lake, 1991
Photograph by author

Side pastures have changed little since the historic period. Fences were restored in the 1970s and, with the exception of only minor changes, remain in their historic locations. Most of the fences are clear of vines, except for those in the lower pastures. This includes the one bordering Little River Road, where honeysuckle and wild rose grow upon or along the fencerow.

Some changes in grass composition--orchard grass, fescue and red clover--have created varying color compositions in the spring. Much of the clover can be found in the martin house pasture, just north of the milk house pasture. In general, the fields are uniform in height and composition. All lower pastures today are leased for grazing, and the seven to ten horses kept there are allowed to roam freely

from field to field. The leasee mows periodically resulting in grass heights of no more than four to six inches.

Goats managed by the NPS today are kept in a pasture near the barn. Here they play, sleep, and graze to the delight of hundreds of park visitors. The grass is maintained by park staff and is mowed two to three times annually.

The integrity of side lake and pastures is strong as a result of existing boundaries, lake edges, feeder streams, vegetation, fence lines, animals, and land use. All of these contribute to the historic setting, thus contributing to the feeling of the historic period.

TRAILS AND WOODLANDS--Since the NPS's acquisition, both Memminger and Big Glassy trails have been widened to accommodate park vehicles. This was done for the safety of the many park visitors who walk these trails. As a result of such use, however, many places of the trail exhibit signs of erosion. Attempts have been made to divert run off into the woods, but the problem persists in a few areas.

Another change occurred with the realization that part of Memminger Trail actually crossed out of the park onto private property. Since then, a small portion of the trail has been re-routed to remain within park boundaries.

Because the woodlands surrounding the paths have not been altered, the visitor's experience is almost exactly the same as the Sandburgs experienced. From field observations, wildflowers to be found along trails and rock outcrops include Solomon seal (*Polygonatum biflorum*), bird's foot violet (*Viola pedata*), pussy-toes (*Antennaria plantaginifolia*), alum root (*Heuchera americana*), partridge berry (*Mitchella repens*), rock portulaca (*Talinum teretifolium*), pink lady's slipper (*Cypripedium acaule*), mountain saxifrage (*Saxifraga michauxii*), and chickweed (*Stellaria pubera*). Major trees and shrubs found in these areas are: chestnut oak (*Quercus montana*), white oak,

hickory, black gum (*Nyssa sylvatica*), white pine, hemlock, red maple (*Acer rubrum*), dogwood, tulip poplar, mountain laurel (*Kalmia latifolia*), rosebay rhododendron, and vaccinium (*Vaccinium* sp).

MOUNTAIN RESERVOIR--Because it was maintained during the historic period, the reservoir on Big Glassy mountain needed only minimal work in the 1970s. Today it is cleaned out periodically and continues to maintain its historic integrity.

VIEWS--Views represent an important part of the Connemara experience. Most of the important views experienced by the Sandburgs are today threatened by encroaching trees and other vegetation that block, crowd, or obscure historic views. From the northern edge of front lake and from the southern edge of the parking lot, one can experience the filtered view of the house above the front pasture. This view, however, is constantly threatened by encroaching vegetation along the front pasture's eastern edges and is particularly vulnerable to trees along the western shore of front lake. As these trees grow, the height blocks the view of the pasture and eventually will block the view of the house.

Removal of trees along the lake edge in the early 1980s restored the historic view as experienced from the lake's northern edge. This task also restored the view of the lake from the front porch of the main house. Looking from the porch the view of the lake appears intact with only partial interference from a few tall trees.

The view of the nearby hills of Ravenwood from the rock outcrop behind the main house is now closed. This is because of the encroachment of white pine and hemlock upon the outcrop, a process which has been occurring for many years. This narrow vista experience has been lost.

The view from atop Big Glassy Mountain has also changed. Much of the encroaching vegetation can be attributed to increasing heights of trees off the property,

although some on-site trees are affecting the southern and northern edges of the vista.

Finally, the view of the side pastures and barn have not been affected through time. A driver along Little River Road will experience a similar sight to that of the historic period as this view retains its historic integrity.

ROCK OUTCROPS--The rock outcrop behind the Sandburg home continues to shrink because of the encroaching vegetation. White pine and hemlock are primary invaders; however, succession has been accelerated on one side because of escaped exotics. The culprit this time is English ivy, apparently either planted near the lily garden or remaining from the Smyth period. The vine has completely covered areas west and south of the amphitheater. Leaves and other debris are held in place by the vine, creating new soil and the opportunity for the establishment of mosses and grasses, which in turn increase soil depth.

Integrity to this part of Sandburg's home remains intact for the present, although the amount of exposed rock is less than it was thirty years ago. Without human intervention, natural processes of successional change will cause this area to eventually transform into woodland.

SUMMARY

Overall, Connemara exhibits a high degree of integrity. The location of structures, roads, gardens, woodlands, and pastures are true to the historic period. The existence of all historic structures, including fences and walls, much of the historic vegetation, streams, wildlife, and woods preserve the setting of the site. The surrounding low-density residential development and large tracts of mountainous terrain preserve the rural setting associated with the Sandburg period.

Present management techniques, however, have altered the feeling associated with the historic past. The site no longer expresses the family's love of wildness nor the constant changes, natural and man-made, that defined the character of Carl Sandburg's Connemara. Thus, while the presence of historic vegetation, boundaries, and structures provide a strong sense of historic integrity, the treatment of landscape features has resulted in a visual quality unlike that of the historic past.

CHAPTER FIVE

ALTERNATIVES FOR MANAGEMENT

The National Park Service's objectives for the management of Connemara are as follows:

- 1) to "preserve and perpetuate the landscape as Carl Sandburg knew it,"
- 2) to "implement the 'living farm' concept through reestablishment of the Sandburg goat herd," and
- 3) to "designate the area, or portion of it, as an environmental study area" (NPS 1971, *Master Plan, Carl Sandburg National Historic Site*, 21).

Shortly after implementation, the living farm program was found to be too costly. The goat herd was reduced to a smaller more manageable number. In order to fulfill the first objective, the Resource Management Plan (RMP) should prescribe a policy of restoring the natural processes and the management practices that occurred during the historic period. By doing so, the feeling associated with the historic past can be restored, and the significance of the site can be better understood by the public. The third objective suggests a management policy which enhances the natural diversity of the site. Eradication or halting the progress of diseases and invasive species should be strategies identified in the RMP.

The Secretary of the Interior's Standards for programs affecting cultural resources were determined for those resources listed or eligible for listing in the National Register

for Historic Places (U.S. Dept. of Interior, 1979). These standards were developed to define strategies to be applied for managing registered landscapes. The standards were designed mainly for the preservation of structures, however, application to biotic cultural resources can be made. They include:

1) Acquisition--". . . the act or process of acquiring fee title or interest other than fee title of real property" (U.S. Dept. of the Interior, 1979, 2).

2) Protection--". . . the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield a property from danger or injury." Such treatment is temporary in nature and anticipates future preservation treatment (U.S. Dept. of the Interior, 1979, 2). An example of applying this to biotic cultural resources could include the fencing off of a historic landscape to prevent harm from domestic animals such as cattle or sheep, and the measure could be temporary or permanent.

3) Stabilization--". . . an act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present" (U.S. Dept. of the Interior,

1979, 2). An application of this measure to a biotic cultural resource might include the removal or control of invasive species damaging or crowding out historic vegetation.

4) Preservation--". . . the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site" (U.S. Dept. of the Interior, 1979, 2). This may include initial stabilization work and ongoing maintenance through periodic replanting, and maintaining the structure and organization of the biotic community. The NPS later extended this definition to "the act or process of applying measures to sustain the existing terrain and vegetative cover of a site. . ." (NPS 1981b; Ch. 1, 12).

5) Rehabilitation--". . . the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values" (U.S. Dept. of the Interior, 1979, 2). Areas damaged from mineral leaching or erosion can be improved by amelioration of soils or reseeded. Another example could be improving drainage of an area historically dry.

6) Restoration--". . . the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work" (U.S. Dept. of the Interior, 1979, 2). The NPS extended the definition of restoration to include "the act or process of recovering the general historic appearance of a site . . . by the removal of incompatible natural or human-caused

accretions and the replacement of missing elements. Restoration . . . can be partial or complete" (NPS 1981b; Ch 1, 13). An example of this treatment can be found in the planting of additional fruit trees in an historic orchard where some of the original historic species still exist. In doing so, the form and details of the original plan are followed.

7) Reconstruction--". . . the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period of time" (U.S. Dept. of the Interior, 1979, 2). The NPS redefined reconstruction as "accurately recreating a [cultural resource] which no longer exists to its original appearance at a given point in its history . . . [It] . . . may be partial or complete" (NPS 1981b; Ch. 1, 13). Reconstruction of biotic cultural resources would involve reintroducing historic plant and animal populations to recreate the historic community on the original site. The difference between restoration and reconstruction depends upon the presence of historic plant or animal populations on the site. Where any of the historic populations are present, a recovery would be considered a restoration. Where none remain, an effort to recover such plant and animal species would be considered reconstruction (Firth 1985, 8).

The NPS's redefinition of preservation, restoration and reconstruction as applied to the preservation of cultural resources was an attempt to include strategies for historic landscapes. Unfortunately, the definitions continue to emphasize form. By neglecting the need to include historic management techniques within the definition, the strategies fail to deal adequately with the dynamic character of vegetation. The objectives for landscape management of CARL, to "preserve and perpetuate the landscape as Carl

Sandburg knew it," should include the restoration of historic management practices that reintroduce the processes of change so characteristic of Sandburg's Connemara.

Because it is not always feasible to preserve or restore all components of the historic scene, Firth (1985, 56) has identified three alternatives to the preservation and restoration of biotic cultural resources. They are:

1) replacement with equivalent communities, in which present day varieties and breeds are substituted for the historic populations. The historic land use is repeated but the historic community is replaced with a newer version;

2) replacement with a grassland community, in which varying mowing regimes and grazing and burning techniques can delineate significant areas by producing variations in composition (Firth 1985, 60); and

3) release or return the area to native vegetation and wildlife (Firth 1985, 65).

RESTORATION ALTERNATIVES

To determine the feasibility of restoring the myriad of changes typical of the historic period, several factors should be considered:

1) sufficiency of documentation,

2) reasons for losses to historic vegetation and availability of means by which to halt or remove the causes. This refers to the possible loss of many anthracnose-infected dogwood trees naturally occurring along the entry drive; and

3) feasibility of maintaining the site in terms of costs and existing resources.

In Chapter Three, four types of Sandburg management practices were categorized as having occurred during the historic period. They are: 1) vegetation released to successional change, 2) vegetation removed and replanted, 3) vegetation added, and 4) vegetation lost. For each type, alternatives for restoration are suggested that would fulfill the goals of the NPS and be within the prescribed management policy. Each alternative is then considered in view of the criteria listed above. This discussion lays the ground work for specific management recommendations given in Chapter Six.

There are four possible management alternatives representing the types of management which occurred during the Sandburg period. They are:

1) a repetition of the historic pattern--this includes a complete reiteration of the natural or manmade changes which took place from 1945 to 1967, and a return to their initial state after a twenty-year period;

2) a modified repetition of the historic pattern--this involves a partial restoration of the historic pattern and may be necessary if documentation is not complete or costs make complete restoration unfeasible. Modifications might include expanding the historic time period or repeating only parts of the historic changes;

3) the preservation of an area as it was at a specific time--this involves maintaining a particular landscape at a certain period of time without change and may be necessary because of constraints in budget or lack of documentation which prohibit better alternatives; and

4) the release of an area to hardwood sere--when costs or a lack of documentation prohibit any management of the area, a return to woodland is the least expensive.

Finally, mention of the synchronization of the various maintenance cycles is needed. As documentation does not reveal any pattern of maintenance cycles during the historic period, it is not possible to make any such recommendations in the management plan.

As the recency of the historic period means many of the same maintenance techniques and tools are still employed, the use of the exact historic management techniques and tools is not stressed in this document.

AREAS WHERE VEGETATION WAS RELEASED TO SUCCESSIONAL CHANGE DURING THE HISTORIC PERIOD

SPRING GARDEN AREA AND ROCK OUTCROPS--Two areas in this group can be restored by repeating the historic pattern. The successional change from grassland to shrub stage is feasible, as it occurred in the spring garden area and in the rock outcrop area near the summer garden. Releasing these grassy areas to a shrubland sere and later returning them to grassland would involve intensive management only periodically and would free up time for other management duties.

A partial restoration of this historic pattern, the second alternative, suggests maintaining the area through part of the successional process, for example, in a stand of grasses or of grasses and shrubs. This alternative would require slightly more maintenance and would suggest freezing the landscape in a particular moment in time. Disadvantages are that the process of successional change would be altered. In addition, the variety of change occurring at the farm would be lowered. A final alternative would be to

release the areas completely, allowing for a return to a hardwood stand. Although this would be the least costly of the choices given, such a landscape would not be historically accurate.

For these two areas, release to shrubland sere is recommended, followed by the removal and the return to grassland, which would repeat the historic pattern of successional change. Costs for this recommendation would involve the labor necessary for the removal of successional species. This would occur only periodically and allow for much flexibility in scheduling. Environmental costs could be the disturbance of nesting birds or other wildlife; however, a winter removal schedule would help minimize this impact.

Other rock outcrops of importance are the one behind the residence and the one atop Big Glassy Mountain. The rock outcrop upon which Carl Sandburg wrote merits attention for its historic significance and for the fact that it is slowly disappearing. Continuing the historic pattern of release will only insure its loss as the woodlands close in upon it. Restoration of this area through reestablishing the original boundaries of the outcrop in 1945 is unfeasible. However a partial restoration, with the removal of some encroaching species, including white pine and hemlock saplings, brambles, and exotic species such as English ivy and common privet, may be the best alternative. This would then require only periodic maintenance and would insure the existence of the outcrop for visitor interpretation, see Chapter Six for more details in the management of this area.

Similar treatment is not presently feasible for the outcrop atop Big Glassy where the family enjoyed such a grand view of the county and the Great Smoky Mountains. Existing views, although somewhat narrowed by encroaching vegetation, continue to maintain their historic integrity. Costs in accessibility and maintenance limit the amount of restoration feasible for this area. Present plans to remove

taller trees off site which block the view are recommended with limited removal of encroaching on-site vegetation.

TRAILS AND WOODLANDS--Existing management of trails and woodlands have continued to promote the historic integrity of these areas of the farm. These policies should be continued.

LAKES--Both side and front lakes underwent successional changes from healthy to unhealthy states during the Sandburg occupancy. Although side lake was dredged in the early 1960s, it had been neglected up until that time. A return to the historic practice of neglect is not feasible as the results will invariably be death for these ecosystems. On the other hand, maintaining the lakes in a moment in time, such as in a pristine condition, would not be historically accurate. A partial restoration, which includes dredging the lakes, removing aquatic vegetation, and releasing the areas for a specified period of time before redredging, would be more in keeping with the historic pattern. Such management would restore the historic qualities of constant change and perpetuate the life of the lakes.

VIEWS--Views from various vantage points on Connemara need protection from encroaching vegetation that tends to block, narrow, or otherwise restrict historic vistas. From the front porch, the slow encroachment of trees and shrubs along the lake edge of front pasture historically narrowed the view. Repeating the historic pattern would involve the initial removal of vegetation encroaching on the eastern edge of front pasture since 1945 and allowing successional growth to recover these areas along the lake edge. After approximately twenty-five years, these shrubs and trees would again be removed and the process allowed to repeat itself. Advantages to this alternative are: 1) its historic accuracy, 2) little or no management required between

periods of removal, and 3) the fixed management schedule of restoration every twenty-five years. Disadvantages to complete restoration are the periodic costs and the public reaction to the removal of large trees, however, good public education may diminish adverse public reaction.

Partial restoration of the front porch view would involve the removal of only certain existing trees when their height or size impedes an established percentage of view to be constantly maintained. This means that a given number of mature trees could be tolerated and only a few would be removed at any given time. Partial restoration would include the establishment of an "obstruction free" viewing zone and a buffer zone where "partial obstruction" could be tolerated. The buffer zone would then be managed by the periodic removal of trees and shrubs.

Advantages to partial restoration are the minimal environmental impact, and the less dramatic impact on viewing. Public awareness of changes in a partial restoration may be minimal and reduce negative public reaction. A disadvantage is that the view will become somewhat static, with little overall change over the decades.

A final alternative is to do nothing and allow encroachment to continue. Such a choice is unacceptable as this would guarantee a loss of the view of the front lake. Of the alternatives given, either partial or complete restoration would be acceptable. Complete restoration offers more historic accuracy and may be the better of the two. However, public reactions and management costs may necessitate the use of partial restoration as the best alternative.

Another view to be mentioned is the filtered view as experienced from the north side of front lake, looking southwest to the residence. Historically, this view was partially obscured by hardwood trees and should be maintained. Existing trees provide this type of experience today.

Sandburg's view of Ravenwood's hillside from the rock outcrop behind his home cannot feasibly be restored. Recommendations for maintaining the rock outcrop where Sandburg wrote are detailed in Chapter Six.

AREAS WHERE VEGETATION WAS REMOVED AND REPLANTED DURING THE HISTORIC PERIOD

Areas representing this type of change received more care during the historic period and therefore require more intensive maintenance. They historically exhibited seasonal variations, such as the flower beds providing early, mid- and late seasonal change. The front yard fence line, in addition, exhibited slower periodic changes. In addition, pastures offered subtle changes due to seasonal color and pasture use.

FRONT YARD FENCE LINE--The front yard fence line is the only area of this group exhibiting slower periodic change. Repeating the historic pattern of removal and replanting in historic order would involve a rotational planting and removal of Rugosa rose, followed by a period of no plantings, followed by two different plantings of shrubs (castor beans in one, and forsythia, weigela, butterfly bush, etc., in the other). After a designated period of time these shrubs would be removed, and the process would be repeated. Obvious advantages would be the accurate representation of the historic period, the provision for historic change, and the availability of historic species. This area is well documented. Disadvantages would be the rigorous monitoring required in the periodic removal and replanting.

A partial restoration in the spirit of the historic pattern would be advantageous in that variety of change could be maintained without requiring such rigorous maintenance. This could be accomplished by relaxing or extending the time period of the changes and/or rotating two or three of

the designated plantings instead of all. Disadvantages to the implementation of this alternative would be the higher periodic maintenance than is presently required.

A third alternative would be to maintain the fence line at a moment in time. Whereas this would be the easiest to maintain, it would not provide for the sequence of changes so typical of the Sandburg landscape. Another question relates to deciding which moment to preserve--early, middle, or late period? In looking at which of the series occurred the longest, it appears that no planting on the fence line could be considered "more typical" than any other.

To preserve the changing character of Connemara and to allow for flexibility in maintenance, a partial restoration plan is suggested. Rotating planting plans would provide the change and variety necessary in the Connemara landscape. Time schedules could be relaxed, and if needed one or two of the rotations could be dropped from the schedule.

DAHLIA/ZINNIA BED--The earliest documentation available is for the late 1950s, after the partial removal of the Rugosa roses. Since it is not known exactly when this bed was installed (sometime between 1953 and 1963), an accurate replication of the historic time pattern is not feasible. A partial restoration could be feasible by planning the installation of the bed during the stages of planting in which Rugosa roses are not present on the fence line. Repeating the flower bed/no flower bed pattern to coincide with fence line plantings of Rugosa roses might best reflect the spirit of change typical of the period.

Another alternative would be to maintain the bed at a late period stage and provide variations in color and species on an annual basis. If the roses became too difficult to manage and were opted out of the rotation plan, this would be the best alternative.

NORTH FOUNDATION BED--Incomplete documentation limits the number of alternatives available for this area. Repeating the historic pattern in historic order is not feasible because of the lack of documentation. The timing of changes and the identification of species removed prior to those existing is not known. Partial restoration--removal and replanting of only documented species--in combination with maintaining the existing late period planting would be the best alternative.

EAST FOUNDATION BED--Lack of documentation makes it difficult to duplicate the historic pattern in the proper historic order. Late period documentation provides two planting plans which could be alternated periodically. This would modify the alternative of maintaining a moment in time but keep the spirit of Connemara by providing variety and change.

LILY GARDEN--The same problem of the east foundation bed applies here in that documentation exists for the late Sandburg period only. A modified version of maintaining a late period planting would be best suited for this garden. To keep the spirit of change and variety, species selected should provide variety of color, bloom time, and type. A policy of annual or biennial removal/replanting could provide this change.

SOUTH FOUNDATION BED--Rotating plantings in a historically accurate sequence is made difficult by the lack of documentation for the first half of the Sandburg period. Maintaining the spirit of the historic patterns could only be suggested for the late period where documentation is available. This suggests a combination of maintaining a late period planting along with the spirit of change and variety. A rotational plan incorporating these ideas would be the best alternative where two planting plans are periodically alternated.

VEGETABLE GARDEN--Historic patterns of plantings in the vegetable garden are unknown, leaving the alternative of maintaining a "period" vegetable garden the best solution. Also, maintaining the garden at its historic size is not feasible given limited human resources. A smaller plot, of existing proportions, could be planted with species typical of the historic period. Rotating a variety of vegetables each year could provide the spirit of change typical at Connemara. In addition, varying the location of this garden and introducing grasses or legumes in a "rotation" of such rectangular plots could provide visual variety each year, as well as returning nutrients to the soil. Costs involved in these proposals would be minimal.

PASTURES--Alternatives for managing both front and side pastures are limited by their feasibility and historic accuracy. Returning the goat pastures to grazing by goats would involve greater expense to care for the additional animals needed for effective grazing. Another alternative, managing these areas for hay, would not be historically accurate. Partial restoration, as exists with current land use and management, should be continued as historic integrity is maintained and costs are minimal. It might be suggested to reseed varying mixtures of orchard grass and alfalfa at the time when pasture renewal is necessary in the goat pastures. The lower pastures and front pasture could be planted with a mix including orchard grass, fescue, and clovers.

Rotational grazing is an alternative management technique that may be feasible and was historically practiced by the Sandburgs with the goat herd. The existing side pastures could be utilized for rotational grazing of horses to recreate historic management techniques. Such practices are better for pasture grasses and clovers in that each of the four pastures is grazed until all available new growth is cropped. The horses are then put into the next pasture while the old pasture puts out new growth. Grasses

in pastures reaching heights too tall for palatability will have to be mowed; however, the total area subject to mowing will be reduced. The disadvantages include: 1) the periodic rotation of animals from one area to another, and 2) the existing size of each pasture. Because the pastures average five to six acres each, the present six to eight horses may not be large enough in number to graze an area quickly before being placed into the next pasture. If this occurs, rotational grazing will not be possible unless smaller areas are fenced off.

AREAS WHERE VEGETATION WAS ADDED IN THE HISTORIC PERIOD

Documentation reveals many additions in areas near the main house. They include herbaceous species, shrubs, and/or trees to areas such as the entry drive, the magnolia/ginkgo area west of the house, the bird feeding area south of the house, the gate area of the kid goat pen near the garage, and the area between the front yard and summer garden.

Except for the reinforcement of the entry drive with hemlock trees, most additions appear to have occurred late in the historic period. Lack of evidence for patterns and order of planting make many of the alternatives discussed previously unsuitable. Maintaining these late period plantings as they are, and replacing with like kind when necessary would be the best alternative.

As for the entry drive, continuing with the existing hemlock, envisioned by Paula Sandburg to replace the white pine, is recommended. Future replacements of these trees may be limited to hemlock, which is more shade tolerant than white pine, when the integrity of this drive is once again threatened.

VEGETATION LOST DURING THE HISTORIC PERIOD

Losses occurring during the historic period appear to have resulted from natural causes. They include three rose-of-sharon in the front yard, an old-fashioned rose centering the old carriage turnaround, and white pine along the entry and back drives. Several factors need to be considered in determining whether or not certain species should be replanted. They include their importance to the historic scene, commercial availability of the species and variety or a suitable substitute, and maintenance.

Losses of white pine along the entry drive were counteracted by the addition of parallel rows of hemlock trees. The back drive, however, received no such treatment, and the integrity of this tree-lined drive deteriorated during the historic period. These trees represent a continuum of time from Memminger to the present. As gaps along the drive were typical of the Sandburg period, a replanting of those trees lost would allow for future gaps when older trees succumb or are removed.

Of the remaining two losses to the house area, both survived from pre-Sandburg periods through at least half of the Sandburg occupancy. Replanting of the roses-of-sharon and a suitable replacement for the lost rose of the carriage turnaround is recommended.

The only documented loss to the house area after the historic period involves the removal of the Smyth boxwood near the lily garden east of the main house. This was probably done in order to provide access to the amphitheater installed nearby. As these boxwood represented earlier periods of Connemara's history and remained throughout the Sandburg occupancy, restoration needs to be considered. Rerouting visitors to the amphitheater would be necessary to avoid trampling restored vegetation.

CHAPTER SIX

MANAGEMENT RECOMMENDATIONS

This chapter discusses recommendations for a landscape management plan for Carl Sandburg Home National Historic Site. The chapter includes:

- 1) a statement of policy guiding all management recommendations;
- 2) overall management recommendations including general procedures, implementation feasibility, priorities, and the flexibility of the proposed management program;
- 3) management recommendations by area; and
- 4) suggestions for visitor interpretation.

STATEMENT OF POLICY

The significance of the Connemara landscape is expressed in the way in which Carl Sandburg and his family manifested their appreciation of nature's many different forms. From introduced species to native vegetation, their love of nature's wildness, dynamic successional changes, and the variety among flowers and shrubbery were demonstrated throughout their years at Connemara. The different management techniques employed during the

historic period created the landscape that Carl Sandburg knew.

These management techniques, comprising the Sandburg philosophy as documented during the historic scene (the late period of 1960-67) should be the guiding policies in all recommendations. The recommendations should reflect the Sandburgs's love of nature in all forms, from more highly managed flower beds to untidy areas released to successional change. Wherever such recommendations are in conflict with NPS policy, precedence will be given to NPS guidelines and standards.

GENERAL MANAGEMENT RECOMMENDATIONS

GENERAL PROCEDURES--Recommendations are given under two general categories: 1) those based on documented historical research or "Sandburg Philosophy," and 2) general maintenance procedures as related to pruning, fertilizing, and controlling exotic species.

RECOMMENDATIONS BASED ON SANDBURG PHILOSOPHY

1. Ground covers--It is recommended that lawn grasses be cut on the average of every three weeks, or when they reach four to six inches in height. Maintain mowing height at three inches. Herbaceous species mixed with grasses along the entry and back drive edges should be allowed to grow

taller, five to seven inches, before cutting. A monthly mowing schedule is recommended for these areas.

2. Leaf litter--Removal of leaf litter is discouraged. Keep fallen leaves on ground as long as possible. To reduce the hazard of fire, mowing leaves is preferred to blowing in order to keep them from piling up around historic structures.

3. Replacement of lost historic species--Losses of historic vegetation have been documented in Chapters Four and Five. The criteria for the replacement of species should include adequate documentation, length of time present during the historic period, and costs of replacement. The vegetation lost and recommended for replacement is discussed later in this chapter.

4. Green House--In the future, consideration should be given to the use of the green house located in the main house for germinating seeds ordered for the various flower beds. This suggestion arises from the plans to build a new park office and open the existing offices in the Main House to the public. Cut flowers from the gardens should also be brought into the house and placed in vases in various rooms. Zinnias and dahlias were typically brought inside.

GENERAL MAINTENANCE PROCEDURES

The following procedures must be in compliance with the park's Integrated Pest Management program.

1. Pruning and spraying--Pruning should vary according to species. However, removal of old wood every one to three years, except where otherwise indicated, is recommended to keep shrubs healthy. Periodic spraying for disease is highly recommended to maintain health of historic boxwood and American elms.

2. Control of Exotic Vegetation--The invasion of common privet (*Ligustrum vulgare*) in several parts of the farm poses serious threats to the natural vegetation. Several areas already exhibit dense stands. Although complete removal would be difficult, if not costly, efforts to control the exotic are highly recommended. Removal can be effected through several means. Cutting at the time of bloom and again before frost can deplete root reserves. This procedure may have to be repeated for several years before complete eradication, but has the least impact on the environment. An alternative is basal-bark spraying, whereby the woody stem and soil around the root collar of the target plant is soaked with herbicide, such as Round-Up. A variation of this method is stump spraying. Here, the shrub is cut, and a chemical application is made to the stump and root collar. Both methods have minimal environmental impact as only the target species is treated.

3. Dogwood anthracnose--Treatment of selected flowering dogwoods with benomyl solution should continue. If, however, this process fails or becomes too costly, replacement is not recommended until climatic conditions improve, better treatment becomes available, or disease resistant varieties are developed.

4. Southern pine beetle--Infestations are a naturally occurring phenomenon throughout the south and can best be minimized through monitoring of key historic areas and taking appropriate action. White pine along the entry drive and back drive should be monitored periodically for southern pine beetle. The presence of popcorn-size pitch tubes occurring up to heights of sixty feet indicate southern pine beetle infestation. Beetle spread can be halted by cutting down infested trees and removing or burning them. Insecticides are also recommended on nearby trees of those infected to protect them during beetle emergence. This will

help control the spread of beetles and may protect specimen trees (U.S. Dept. of Agriculture 1978B, 14).

5. Gypsy moth (*Lymantria dispar*) is another potentially dangerous pest to the park. Since 1980, the moth has defoliated almost a million or more forested acres per year in the United States (U.S. Department of Agriculture 1989, 1). This pest prefers oaks, apple, sweetgum, speckled alder, basswood, gray and white birch, poplar, willow, and hawthorn in the East. Older larvae feed on several species of hardwood including cottonwood, hemlock, southern white cedar, and native pines and spruces.

Effects of defoliation depends on the amount of foliage removed, the condition of the tree at the time of attack, the number of consecutive defoliations, available soil moisture and the species of tree. With less than 50 percent of the crown defoliated, most hardwoods will experience only a small reduction in growth. In cases, where more than 50 percent of the tree is defoliated, hardwoods will refoliate by midsummer. Healthy trees will withstand one or two consecutive defoliations; however, weaker trees subjected to other environmental stresses will frequently be killed (U.S. Dept. of Agriculture 1989, 5).

Pines and hemlocks, although not preferred by Gypsy moth larvae, can be subject to defoliation during heavy outbreaks. These conifers are unable to withstand attacks as well as hardwoods as a single complete defoliation can kill approximately 50 percent of the pines and 90 percent of the hemlocks (U.S. Dept. of Agriculture 1989, 7).

Precautions and tactics to lower the impact of an infestation are advised for areas of the park where specimen oaks, pines, and hemlocks have been designated. These include the entry drive and back drive, and specimen oaks in pastures and within the farm area, see figure 6.8 for the locations of these trees. The following tactics are

recommended from the Department of Agriculture (1989, 8 and 9):

1. Destroy egg masses found on outbuildings, on fencing, and in woodpiles. Burn or soak egg masses in kerosene or soapy water. Painting them with commercially available products, such as liquid detergents, is also effective.

2. Place burlap on trees to provide shelter for older larvae seeking protected resting places during the day. This can provide valuable information on the number and severity of the infestation. When populations are sparse, larvae and pupae can be destroyed manually.

3. The use of barrier bands to prevent larvae from crawling up the trunks of susceptible trees is also effective. Commercially available double-sided sticky tapes, or sticky materials such as Tanglefoot, petroleum jelly, or grease can be applied to the surface of impermeable materials such as duct tape or tar paper, which are placed around the trunk of a host tree. Such sticky materials should not be applied directly to the bark of trees as petroleum-based products can cause swelling and cankering on thin-barked trees.

4. Maintain the health of specimen trees by providing mulch or ground covers that do not compete for moisture and nutrients.

5. Water specimen trees during periods of drought to maximize recovery during refoilation.

6. Avoid stressing trees during times of construction by preventing soil compaction and root or trunk damage.
7. Avoid applying lime or weed killers around trees.

IMPLEMENTATION FEASIBILITY

Much of the prescription for management was determined with existing maintenance resources in mind. Generally, relaxed maintenance of the site may free up existing staff for other needs. As the management recommendations are designed for flexibility, it is hoped that additional costs will only occur periodically. Installation of plantings or removal of exotics may require the hiring of additional temporary help.

Blue Ridge Community College, of Hendersonville, North Carolina, agreed to begin propagation of historic species with the understanding that historic vegetation will eventually be transferred to a nursery site at Connemara, see figure 6.8 for suggested nursery location. Additional staff may be needed in the future to maintain this nursery. Other costs will arise from the purchase of stock from local and regional nurseries.

PRIORITIES

The Sandburg philosophy placed emphasis on all areas and all stages of change throughout Connemara. Because a landscape associated with a historic person expresses significance through its collective elements, no particular landscape feature stands out as having greater weight than any other.

Nonetheless, certain areas received more maintenance than others indicating Paula Sandburg's interest in particular areas of the farm. They include the flower beds, shrubbery, and trees around the main house, the entry

drive, the pastures, and the structures associated with goats. Carl Sandburg, although not an active participant in the management of the farm, experienced Connemara through his work and his relaxation. Areas used by him include the rock outcrop behind the house where he would write, the trails that he would frequently hike, and the views that he would enjoy from atop Big Glassy Mountain and from the front porch. These areas could be considered a priority.

FLEXIBILITY OF MANAGEMENT RECOMMENDATIONS

This management plan should serve as a guide for restoration. Availability of funds and labor, changes in staff, and safety precautions will play important roles in shaping landscape management practices at Connemara. For this reason, much flexibility is provided for in the management recommendations that follow.

MANAGEMENT RECOMMENDATIONS BY AREA

Recommendations in each of the following areas are divided into two sections. Initial recommendations are based on historic documentation. At the end of each section are recommendations for general maintenance procedures.

ENTRY DRIVE (figure 6.1)

A continuation of the existing process is recommended, with the outer rows of hemlock replacing aging white pine. Given the shade intolerance of white pine, any future replanting of the entry drive should be done with hemlock (*Tsuga canadensis*) when the integrity of this landscape feature is threatened again.

Grasses and herbaceous species along the entry drive edges and within the grassed island where the drive forks, should be cut after reaching heights of five to seven inches,

or approximately once a month. Fallen leaves and branches should be allowed to remain on the ground. Allow English ivy to grow over retaining walls and maintain by periodic thinning or removal.

The rock outcrop near the upper entry drive should be maintained by winter mowings of the grass and herbaceous species surrounding it. A removal/reduction program for the existing privet (*Ligustrum vulgare*) is strongly recommended.

General Maintenance Procedures

Continue with periodic fertilizing and maintenance of American elms. Boxwood and American hollies along the upper entry drive should also be kept healthy by periodic feeding and spraying, if necessary. Light trimming of boxwood every five years to maintain a very general conical shape is recommended. The asphalt entry drive is in keeping with the late historic period and should be maintained.

BACK DRIVE TO BARN (figure 6.1)

Restoration of the integrity of the tree-lined back drive can be achieved by replacing lost white pine. As gaps were historically typical, future losses of existing older trees will provide new gaps. Periodic replanting of white pine should occur every one hundred years. Replenishment of crushed gravel to the back drive is recommended whenever necessary.

General Maintenance Procedures

The American boxwood should be fertilized periodically to maintain its health. Spraying for diseases is recommended when necessary. The gateposts to the spring garden should be replaced, but not the gate.

SUMMER GARDEN

The present restoration of the summer garden should continue, following Margaret Sandburg's planting plan (figure 3.6), as funds become available. The species planted should only be those included in Paula Polega and Margaret Sandburg's lists. Cultivars and varieties should be those typical of the historic period. Modern varieties should not be used unless "period" species cannot be found (see appendices B and M for suggested species and sources for stock and seed). The summer garden should express a variety of color and bloom throughout the season. Periodic changes through additions and omissions of different species is recommended to provide variety throughout the years. Once established, the summer garden should appear fully planted but somewhat neglected. Weeds should be tolerated.

General Maintenance Procedures

Honeysuckle and privet should be kept under control by periodic removal or cutting every two to three years.

MAIN HOUSE, NORTH SIDE (figure 6.2)

FOUNDATION BED

This area should be maintained to represent the late historic period plantings. The overly mature columnar arborvitae should be removed and replaced with like kind. When the mature caliper specimen reach the height of the porch handrails, (approximately fifteen feet), the arborvitae should be replaced with one to two inch specimens.

Some variety of color can be provided in the bed west of the porch through the addition of a few snapdragons and occasionally white impatiens. The wren house should be returned to the front porch after painting is completed. Because of its damaging effect on mortar, English ivy should not be allowed to grow on foundation walls.

FRONT YARD

The rose-of-sharon shrubs lost during the historic period should be replaced. Japanese maples and star magnolias should be replaced only when necessary.

CIRCULAR DRIVE

Crushed limestone should be added to the circular drive as needed.

DAHLIA/ZINNIA BED

Maintaining this bed in its condition in the late historic period is recommended. Paula Polega's drawing should be followed as planned, see figure 6.3. Modern varieties are not recommended except when historic species cannot be found. Dahlias should be staked and watered as needed. This bed will need weeding, however, some weeds can be tolerated. Variations in color and species should occur on an annual basis, see recommended species listed in appendix C.

FENCE LINE

A partial restoration of the historic pattern is recommended to provide interpretation of the late historic period. Although figure 6.3 illustrates the historical changes occurring during the Sandburg occupation, Plan C provides the best interpretation for restoring a late historic scene and should be followed. The flowering shrubs as suggested by Paula Polega (figure 3.8) are recommended to be added to the fence row.

General Maintenance Procedures

Rhododendrons and azaleas in the north foundation bed should be thinned by removing one third of the shrub each year for three years. Careful removal of old wood should maintain the general shape of each shrub. These shrubs should be kept at three feet in height. The bridalwreath spirea should not be trimmed, allowing it to grow freely and

in disarray. Occasional pruning, every five to six years to keep within a three to four foot height is recommended; otherwise, this shrub should be left alone. Pruning should occur after flowering. The abelia hedge should be allowed to reach heights of six to seven feet and maintained by trimming. Straggly new growth should be allowed before trimming. Legginess underneath should be tolerated.

In the front yard, pruning of hydrangeas and flowering quince can be restricted to occasional removal of dead or old wood every three to four years. Pink flowering dogwoods should be sprayed and protected against anthracnose. The replacement of dogwoods is not recommended until solutions to this problem have been found. Lawn grass should be mowed to three inches after reaching heights of four to six inches.

Pruning of fence row shrubs should be light with removal of dead wood every two or three years. Allow shrubs to reach heights of four to five feet before cutting back.

MAIN HOUSE, EAST SIDE (figure 6.2)

FOUNTAIN BED

Historical documentation reveals a variety of plantings in the east foundation planting beds. In figure 6.4, two planting plans are interpreted from photographs taken of the area in the 1960s. Plan A conforms best to the existing plant materials and is recommended for implementation.

LILY GARDEN

Figure 6.5 provides a general interpretation of Paula Sandburg's lily garden taken from historic photographs of the late historic period. Species which provide a variety of color and bloom time should be selected. Asiatic and other hardy lilies, as well as Connecticut Yankee Blue delphiniums should be present each year.

AMPHITHEATER

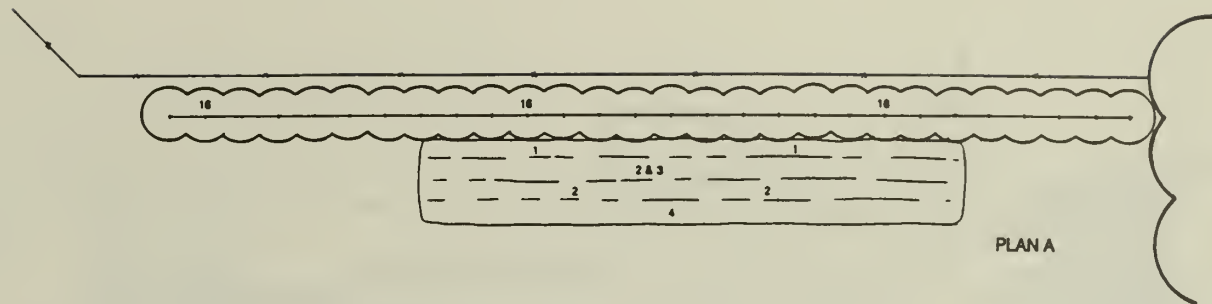
(See General Maintenance Procedures)

- PLANT KEY**
- | | |
|--------------------------|--------------------------------|
| 1. DAHLIAS | DAHIA SP. |
| 2. ZINNIA | ZINNIA SP. |
| 3. MARIGOLD | TAGETES SP. |
| 4. BLUE SALVIA | SALVIA FARINACEA |
| 5. RED SALVIA | SALVIA SPLENDENS |
| 6. LIRIOPE | LIRIOPE MUSCARI |
| 7. BUTTERFLY BUSH | BUDDLEIA DAVIDI |
| 8. FLOWERING QUINCE | CHAENOMELES SPECIOSA |
| 9. SMOKE TREE | COTINUS COGGYGRIA |
| 10. FORSYTHIA | FORSYTHIA 'LYNWOOD GOLD' |
| | 'BEATRIX FERPANO' |
| 11. A. WATERER SPIREA | SPIRAEA X BUMALDA 'A. WATERER' |
| 12. BRIDALWREATH SPIREA | SPIRAEA PRUNIFOLIA |
| 13. TAMARIX | TAMARIX PARVIFOLIA |
| 14. BLUELEAF HONEYSUCKLE | LONICERA KOROLKOWII |
| 15. WEIGELA | WEIGELA FLORIDA |
| 16. RUGOSA ROSE | ROSA RUGOSA |

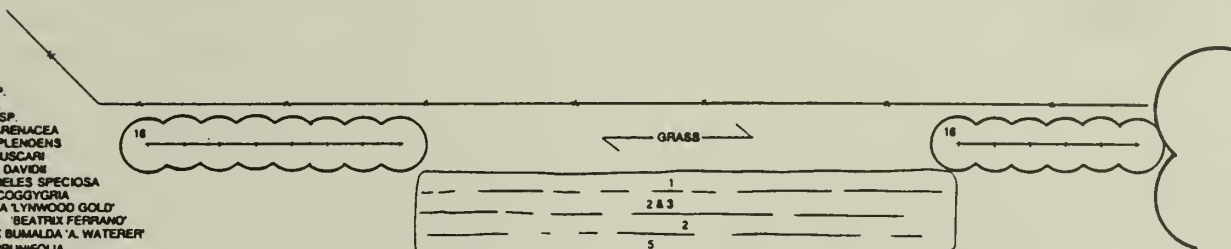
NOTES:

DAHIA/ZINNIA BED SHOULD BE WEEDED REGULARLY.

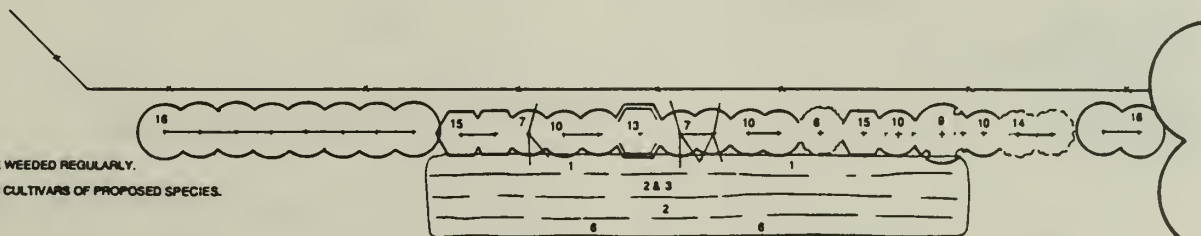
SEE APPENDICES C AND D FOR CULTIVARS OF PROPOSED SPECIES.



PLAN A



PLAN B



PLAN C



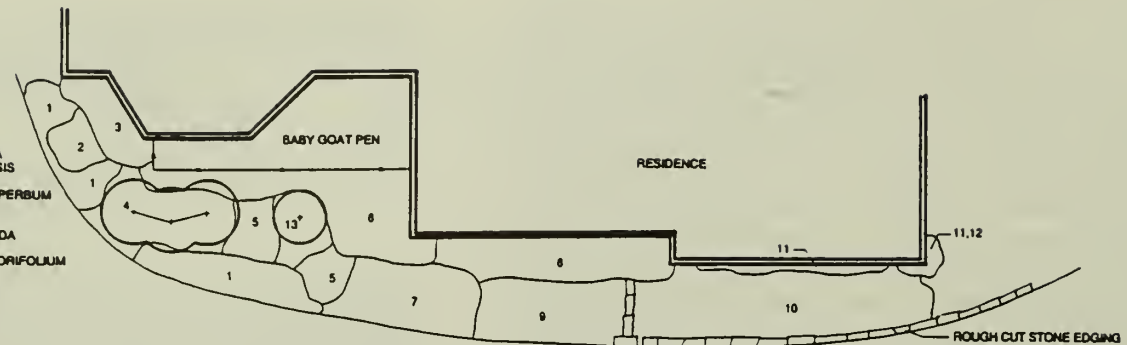
FRONT YARD FENCE LINE & DAHLIA ZINNIA BED PLANTING PLANS



Figure 6.3--Front Yard Fence Line Planting Plans

PLANT KEY --PLAN A

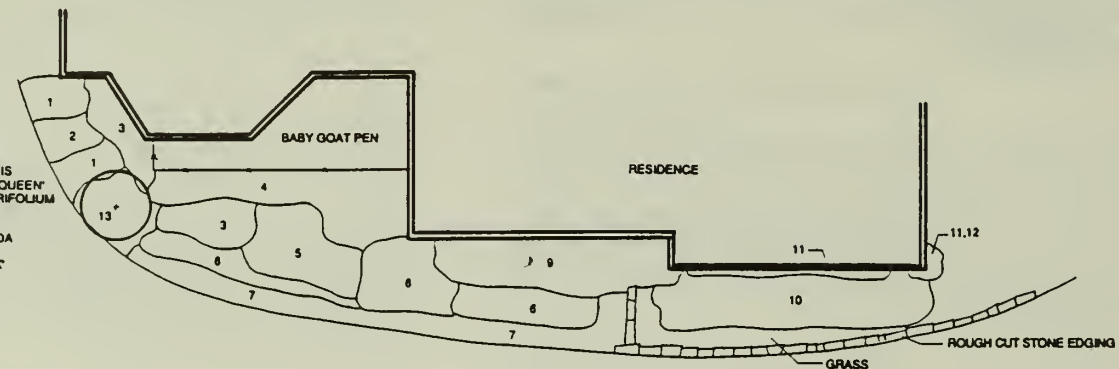
- | | |
|---------------------|----------------------------|
| 1. DAFFODILS | NARCISSUS SP. |
| 2. CINNAMON FERN | OSMUNDA CINNAMOMEA |
| 3. FOXGLOVE | DIGITALIS X MERTONENSIS |
| 4. NARONIA | NANDINA DOMESTICA |
| 5. SPASTA DAISIES | CHRYSANTHEMUM X SUPERBUM |
| | 'ALASKA' |
| 6. CLEOME | CLEOME SPINOSA |
| 7. DAYLILIES | HEMEROCALLIS X HYBRIDA |
| 8. TATARIAN DAISIES | ASTER TATARICUS |
| 9. CHRYSANTHEMUMS | CHRYSANTHEMUM X MORIFOLIUM |
| 10. IMPATIENS | IMPATIENS WALLERIANA |
| 11. MORNING GLORIES | IPOMEA TRICOLOR |
| 12. BALTIC IVY | HEDERA HELIX 'BALTICA' |
| 13. ACUBA | ACUBA JAPONICA |



PLAN A

PLANT KEY--PLAN B

- | | |
|---------------------|-----------------------------|
| 1. IMPATIENS | IMPATIENS WALLERIANA |
| 2. CINNAMON FERN | OSMUNDA CINNAMOMEA |
| 3. FOXGLOVE | DIGITALIS X MERTONENSIS |
| 4. CLEOME | CLEOME SPINOSA 'PINK QUEEN' |
| 5. CHRYSANTHEMUM | CHRYSANTHEMUM X MORIFOLIUM |
| 6. IRIS | IRIS 'BEARDED HYBRIDS' |
| 7. LIRIOPE | LIRIOPE MUSCARI |
| 8. DAYLILIES | HEMEROCALLIS X HYBRIDA |
| 9. TATARIAN DAISIES | ASTER TATARICUS |
| 10. MARIGOLDS | TAGETES 'CRACKERJACK' |
| 11. MORNING GLORIES | IPOMEA TRICOLOR |
| 12. BALTIC IVY | HEDERA HELIX 'BALTICA' |
| 13. ROSE-OF-SHARON | HIBISCUS SYRIACUS |



PLAN B

NOTES:

CONSULT APPENDIX F FOR CULTIVARS OF PROPOSED SPECIES.

WEED FOUNDATION BED ONLY OCCASIONALLY.



EAST FOUNDATION BED PLANTING PLANS

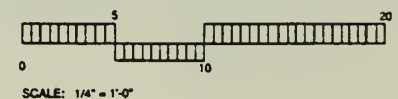


Figure 6.4--East Foundation Bed Planting Plans

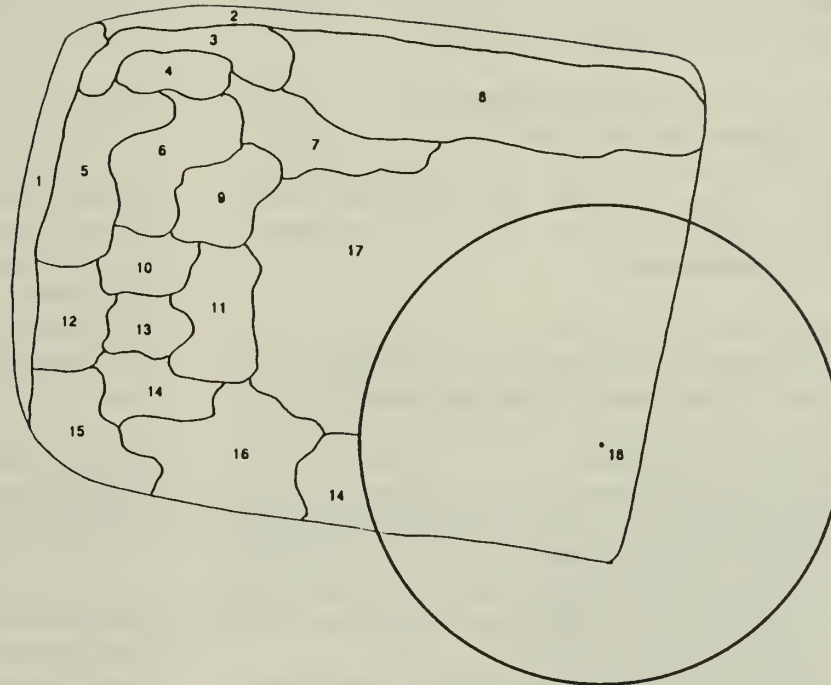
PLANT KEY

- | | |
|---------------------------|--------------------------------------------------|
| 1. SWEET ALYSSUM | LOBULARIA MARITIMA |
| 2. CREEPING BUTTERCUPS | RANUNCULUS REPENS |
| 3. PETUNIAS | PETUNIA HYBRIDA |
| 4. BUTTERFLY WEED | ASCLEPIAS TUBEROSA |
| 5. CT. YANKEE DELPHINIUMS | DELPHINIUM ELATUM |
| 6. GOLD BAND LILIES | LILIUM AURATUM |
| 7. SHASTA DAISIES | CHRYSANthemum X
SUPERBUM 'ALASKA' |
| 8. CHRYSANthemUMS | CHRYSANthemum X MORIFOLIUM |
| 9. TIGER LILIES | LILIUM TRIGINUM |
| 10. REGAL LILIES | LILIUM REGALE |
| 11. HENRYI LILIES | LILIUM HENRYI |
| 12. MADONNA LILIES | LILIUM CANDIDUM |
| 13. TEA ROSE | ROSA 'CHARLOTTE ARMSTRONG' |
| 14. DAHLIAS | DAHLIA SP. |
| 15. MARIGOLDS | TAGETES SP. |
| 16. ZINNIAS | ZINNIA ELEGANS (CUT AND
COME AGAIN VARIETIES) |
| 17. TAWNY DAYLILIES | HEMEROCALLIS FULVA |
| 18. AMERICAN BOXWOOD | BUXUS SEMPERVIRENS |

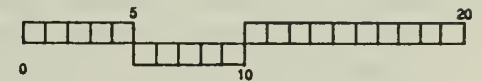
NOTES:

LILY GARDEN SHOULD BE MAINTAINED WITH REGULAR WEEDING. THIN DAYLILIES PERIODICALLY AND DEADHEAD AS NEEDED.

MAINTAIN VARIETY OF PLANTINGS ANNUALLY BY SUBSTITUTING WITH SUGGESTED LIST IN APPENDIX B--LILY GARDEN.



LILY GARDEN PLANTING PLAN



SCALE: 1/4" = 1'-00"

Figure 6.5--Lily Garden Planting Plan

OTHER LANDSCAPE FEATURES

Replacing the rose marking the center point of the Memminger and Smyth carriage turnaround is recommended. A pink Damascena rose is suggested (*Rosa damascena*). The pawlonia and columnar arborvitae should only be replaced when they die. The bird feeder outside Margaret's bedroom window should be replaced as soon as possible.

Partial restoration of the Smyth period flower bed bordered by boxwood is recommended near the lily garden. Alternative routing of pedestrian traffic to the amphitheater, suggested above, would protect these shrubs from trampling. Old English boxwood (*Buxus sempervirens* 'Suffruticosa') is recommended.

General Maintenance Procedures

Weeds in the foundation bed should be tolerated and removed only three to four times in summer (once a month), or if they exceed two feet in height. The shrubbery should not be pruned or trimmed.

In the lily garden, daylilies need annual thinning to avoid their taking over the garden, and spent blooms and stalks should be removed. This garden is the most highly maintained of the flower beds and should be weeded and watered on a weekly basis. Staking of delphiniums and lilies is held to be historically accurate.

Species selected for the lily garden should be only those listed in Paula Polega's plan and should include old-fashioned varieties only. Modern varieties may be used as substitutes if period plants cannot be found. Plants of varying color and bloom time are suggested to provide seasonal change. Selecting different species every one to three years can also provide periodic changes in color and type. Appendix I gives a list of suggested species.

Because the amphitheater is not part of the historic scene it is recommended that it be screened from the east side of

the house. Evergreen species (such as *Rhododendron maximum*) are suggested to be placed at the edge of the yard. Alternative routing could divert visitor traffic away from historic boxwood nearby, see figure 6.2 for suggested routes. More permanent facilities are suggested to improve the visual quality of the amphitheater as well as terracing the seating area to mitigate existing erosion.

MAIN HOUSE, SOUTH SIDE (figure 6.2)

FOUNDATION BED

Figure 6.6 provides two plans interpreted from historic photographs and represent late historic period plantings. Plan B follows more closely a 1960 interpretation, whereas Plan A represents a later planting. Because the existing vegetation is more similar to Plan A, it is recommended that this plan be implemented in the restoration of the south foundation bed. Suggested plants are listed in appendix G and in figure 6.6.

BIRD FEEDING AREA

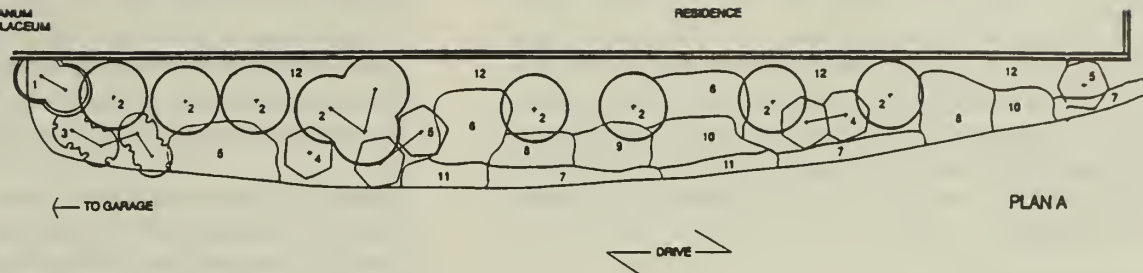
Bird feeders should be kept full each day, and the cement bird bath should be returned.

General Maintenance Procedures

Problems in maintaining the south foundation bed were encountered historically and, therefore, could be expected for the proposed plan. Gaps in the planting bed, weeds, and perhaps even a shrub or flowering species struggling under difficult conditions (i.e. soil, light, and water) could occur. For this reason, the south bed may never have appeared full and well cared for as the lily garden did. Management of the south foundation bed should reflect this difference. Weeding is recommended only when the height of weeds exceeds two feet or if percentage of cover exceeds 50 percent.

PLANT KEY--PLAN A

- | | |
|----------------------|---------------------------|
| 1. NANDINA | NANDINA DOMESTICA |
| 2. ROSE-OF-SHARON | HIBISCUS SYRIACUS |
| 3. OREGON HOLLYGRAPE | MAHONIA AQUIFOLIUM |
| 4. RHODODENDRON | RHODODENDRON CAROLINIANUM |
| 5. FLAME AZALEA | RHODODENDRON CALEDULACEUM |
| 6. DAYLILIES | HEMEROCALLIS X HYBRIDA |
| 7. IRIS | IRIS 'BEARDED HYBRIDS' |
| 8. DAHLIAS | DAHLIA SP. |
| 9. SNOWFLAKE | LEUCOCYCLUM VERNUM |
| 10. FOXGLOVE | DIGITALIS X MERTONENSIS |
| 11. ANNUAL VINCA | VINCA ROSEA |
| 12. IVY & PERIWINKLE | HEDERA HELIX 'BALTICA' |
| | VINCA MINOR |



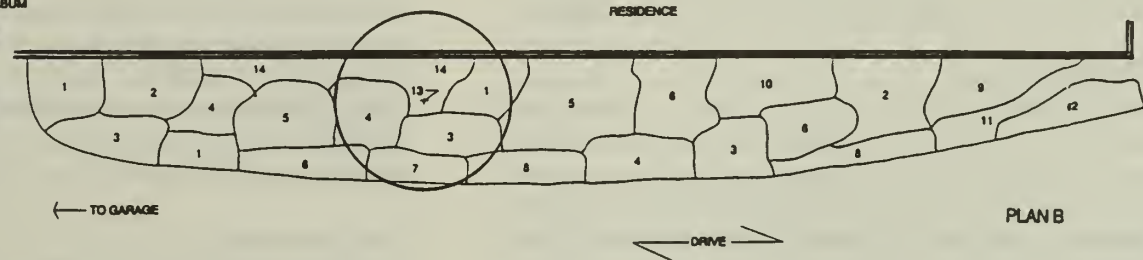
NOTES:

GAPS BETWEEN PLANTINGS, WEEDS, AND SOME LOSSES ARE CONSIDERED HISTORICALLY ACCURATE.

SEE APPENDIX G FOR CULTIVARS OF PROPOSED SPECIES

PLANT KEY--PLAN B

- | | |
|----------------------|-----------------------------------|
| 1. COREOPSIS | COREOPSIS GRANDIFLORA |
| 2. CLEOME | CLEOME SPINOSA 'PINK QUEEN' |
| 3. SHASTA DAISIES | CHRYSANTHEMUM X SUPERBUM 'ALASKA' |
| 4. DAHLIAS | DAHLIA SP. (DECORATIVES) |
| 5. HELIOPSIS | HELIOPSIS HELIANTHOIDES |
| 6. MARIGOLDS | TAGETES SP. |
| 7. ANNUAL VINCA | VINCA ROSEA |
| 8. IRIS | IRIS 'BEARDED HYBRIDS' |
| 9. DAYLILIES | HEMEROCALLIS X HYBRIDA |
| 10. CINNAMON FERN | OSMUNDA CINNAMOMEA |
| 11. FOXGLOVE | DIGITALIS X MERTONENSIS |
| 12. DAFFODILS | NARCISSUS SP. |
| 13. MIMOSA | ALBIZZIA JULIBRISIN |
| 14. IVY & PERIWINKLE | HEDERA HELIX 'BALTICA' |
| | VINCA MINOR |



SOUTH FOUNDATION BED PLANTING PLANS



SCALE: 1/4" = 1'-0"

Figure 6.6--South Foundation Bed Planting Plans

Some thinning of shrubbery in the bird feeding area is recommended to maintain the scale of plant materials within historic period limits. Thin one third of the azaleas and rhododendrons after flowering period ends every year for three years to gradually reduce size. Careful thinning to maintain the general shape of the plant is recommended. Mowing of this area should follow the same schedule as for other grassed areas, after reaching four to six inches in height. Ivy should be allowed to grow over the retaining wall, and forbs growing along the edge of the circular drive should be accepted.

MAIN HOUSE, WEST SIDE

FOUNDATION BED AND CARPORT

Few plantings are recommended for this area. Trumpet vine should be replanted on the carport corner and the northwest corner of the house. Occasional plantings of white impatiens below the bay window are recommended, as well as petunias, impatiens, or scarlet sage for the small flower bed near the carport. Historic species are recommended.

MAGNOLIA/GINKGO AREA

The boxwood hedge near the carport should be re-established and kept in a roughly rectangular shape. Replacement of the dying star magnolia is recommended. The declining magnolia should be left for as long as possible, and the offspring should be allowed to remain where it has rooted. Bamboo should be maintained where established.

General Maintenance Procedures

Mowing of grass in this area should follow the suggested schedule for all lawn grasses. Maintaining the health of the existing boxwood is highly recommended by periodic fertilizing and occasional chemical spraying against disease and pests. Light shearing every five to seven years is suggested to maintain a loose conical shape, and cutting back to four to five feet is recommended every twenty-five to

thirty years to keep within the historic period size. The hydrangeas and nandinas also require periodic pruning to maintain sizes typical of the historic period. Old wood should be removed in late winter or early spring when height exceeds four to five feet. The forsythia can be maintained at three to four feet by removing old wood at ground level after flowering. Pruning of Japanese quince can be restricted to the removal of old wood every four to five years.

CHICKEN HOUSE AND SURROUNDING AREA

Species suggested for restoration include rose-of-sharon, iris and ferns near the goat pen gate, and the trumpet vine between the Swedish house and family garage. Honeysuckle and wild potato vines should be encouraged to grow on all fences. Continuing the existing policy of periodic removal of forbs and vines around the pump house is recommended. This area should appear neglected.

General Maintenance Procedures

Grass in the goat and chicken pens should be allowed to grow taller, six to eight inches before cutting. Also, removal of vegetation at fence lines is not recommended, because this discourages the growth of vines. The health of the viburnum can be maintained by periodic fertilizing and checking for diseases.

TENANT HOUSE

General Maintenance Procedures

A recommended mowing policy for lawn grasses around the house should be adopted here as well. The eventual relocation of the temporary comfort station will improve the integrity of this area. In addition, the removal of invading privet behind the tenant house is strongly recommended.

SPRING GARDEN

The immediate area known as the "spring garden" should be defined by mowing when grass heights reach four to six inches, as proposed for lawn grasses around the main house. This should include the garden itself and a pathway from the woodshed to the vegetable garden area. Scattered narcissus bulbs and daffodils are recommended for the spring garden itself. Small English boxwood shrubs defining the doe burial ground should be replanted.

The surrounding area should be maintained on a slower successional program. Contrasted against the "spring garden's" shorter grasses, this area should appear unused with taller grass and approximately 10 percent invasive shrubs. An annual winter mowing schedule is recommended.

VEGETABLE GARDEN

Partial restoration of the vegetable garden is recommended by maintaining a smaller representative garden. Row crops, as suggested in appendix L, should be varied each year, and species and varieties typical of the historic period are strongly recommended. Varying the location of this garden and introducing grasses or legumes in rotation is suggested to provide visual variety each year. Weeding is recommended if percentage of cover exceeds 30 percent, or if height of weeds exceeds two feet.

Eastern boundaries can be defined by continuing the monthly mowing schedule of the remaining vegetable garden area. This shorter grass will then provide visual contrast with the taller grasses and forbs of the green house area.

FARM MANAGER'S HOUSE

The eastern most portion of the grounds surrounding the farm manager's house should be returned to second growth hardwood. The process of succession can be hastened by planting native trees such as maple, yellow poplar, hickory and white oak and discontinuing the existing mowing

schedule for the area planted. Hardwood saplings should also be planted throughout the yard to insure future shade surrounding the house in summer. Trees should not be planted within approximately thirty feet of the house.

General Maintenance Procedures

Lawn grass should be cut as proposed for areas around the main house. Removal of fallen leaves is not recommended except when piling against house foundations becomes hazardous. In such cases, leaves may be blown or raked away from the house and mowed with grass to prevent re-occurrence of piling.

GOAT BARN (figure 6.7)

Replanting an American elm in the barn yard is recommended for this area. A disease resistant variety is suggested.

General Maintenance Procedures

Grasses in the barn yard should be cut on a similar schedule as for the main house. Allow growth of grasses to continue at fence lines where mowers typically cannot reach.

APPLE ORCHARD (figure 6.8)

General Maintenance Procedures

Management of the apple orchard area should reflect the historic period of minimal use and neglect. An annual mowing schedule is recommended for this area.

TROUT POND (figure 6.8)

Although this area was in complete disrepair during the Sandburg period, its restoration has added to the interpretation of the Smyth's occupation of Connemara.

General Maintenance Procedures

The trout pond can be minimally maintained through periodic checks on structural integrity and by cleaning it out every three to five years. Vegetative growth along pond edges should be tolerated and removed approximately every five to seven years.

DUCK POND (figure 6.8)

General Maintenance Procedures

The present maintenance of periodic checks on structural integrity and the removal of leaves and other debris should be continued. The pond should be cleaned out every three to five years.

PASTURES AND LAKES (figure 6.8)

The reintroduction of historic grasses and legumes is recommended when pasture renewal becomes necessary. Because the existing sod of fescue in both front and side pastures is thick and impenetrable, killing of this grass is recommended to ensure successful reseeding.

Recommendations for the general maintenance of the front and side lakes is described below.

General Maintenance Procedures

The elimination of existing sod poses problems of erosion and cost. Without the use of herbicides, plowing and disking of existing pastures will have to occur three to four times before seeding. If a fall seeding is planned for, plowing will have to begin in June or July and be repeated every three to four weeks until the sod has been killed. Seed mixtures can be broadcast followed by dragging to cover seed and smooth the surface.

Spring seeding poses problems of wet soils from winter rains and increased erosion. To plant in March or April, plowing must begin in January or February. One way to

reduce losses from erosion is to plow on the contour and leave strips of sod between areas plowed.

The use of herbicides to kill existing sods has some advantages over plowing. It costs less than \$25 per acre, is much quicker, and eliminates the problem of erosion. Dead sod can be seed drilled directly, eliminating the costs of plowing and the losses of topsoil from erosion. A contact material such as Gramoxone could be applied in spring followed shortly by seeding of legumes and grasses. The use of herbicides must comply with the park's Integrated Pest Management Plan.

Two mixtures are recommended for seeding. The first is a mix of fescue (12 lbs.), orchardgrass (12 lbs.), Ladino clover (1 1/2 lbs.), and red clover (8 lbs.) proposed for the front and side pastures currently used for grazing (ratios are given per acre). Add little or no nitrogen when fertilizing seeding (20-40 lbs. maximum) to avoid stimulating grass growth which might shade out legumes. Spring applications of nitrogen may not be necessary with a good legume stand. Add potassium and phosphate as indicated by soil tests.

After four to five years, replenishing this mix of grasses and legumes can be done in the winter when fescue and orchard grass are bitten back by cold. The surface Ladino clover (1 1/2 lbs.) and red clover (8 lbs.) should be broadcast, and rain allowed to beat the seeds down to the soil. Maintain these pastures by mowing frequently. Clover keeps best at heights of four inches. A monthly mowing schedule at four inches is recommended to prolong the life of clovers.

The second mixture of legumes and grasses recommended is alfalfa (10 lbs.) and orchardgrass (15 lbs.) This mix is recommended for the milk house pasture, the martin house pasture, and the area currently used for goats near the barn. The pH level is a limiting factor for alfalfa, but if maintained at pH 6.5 the stand will last for years. Monthly mowing is recommended to four inches. The spring growth

of alfalfa will be taller , twelve to eighteen inches, but will be shorter in summer.

Vines and taller grasses should be tolerated along all fence rows in pastures to the extent of no more than 20 to 30 percent coverage, at which point vegetation should be removed. The maintenance of vegetation on or near fences along the entry drive and Little River Road can be relaxed to a tolerance of 40 to 50 percent coverage before removal.

Recommendations for maintaining the lakes can apply to both side and front lakes. Periodic draining and dredging (approximately every ten years) is suggested to maintain the health of the ecosystems and to check the structural integrity of the dams. The partial removal of waterlilies in the front lake should occur when surface coverage reaches 20 percent of the lake. Partial removal of parrotfeather milfoil in the side lake is recommended annually or bi-annually to keep this rapid grower in check. Remove by hand to where approximately 10 to 20 percent of the lake surface is covered by this aquatic. Vegetation surrounding side lake is permitted, but should be removed after reaching heights of five to six feet.

Vegetation on the west shore of front lake is discussed under the following section entitled "Views" in this chapter.

TRAILS AND WOODLANDS (figure 6.9)

General Maintenance Procedures

A continuation of the present trail maintenance policy including the clearing of fallen trees and the use of water bars to check erosion is suggested. Woodlands should be managed through a hands-off policy, allowing natural changes to continue. Any and all honeysuckle and privet encountered in the woodlands should be removed, particularly near rock outcrops where soil accumulation is accelerated by these invasives.

MOUNTAIN RESERVOIR (figure 6.9)

General Maintenance Procedures

The present policy of periodically cleaning out the pond of leaves and other debris should be continued. Every four to five years is recommended.

VIEWS (figure 6.9)

General Maintenance Procedures

Recommendations for the management of the front porch view should follow the maintenance of a view typical of the late historic period. This view should be managed by allowing the lower part of the pasture to regain some of its "rough" character of the late historic period. Figure 6. 9 indicates the area suggested for annual winter mowing. A shrub cover of 10 to 15 percent should be tolerated along with tall grasses and forbs. The marginal area (as determined by the 1945 and 1951 views and indicated in figure 6.9) should be maintained in an early second growth successional stage. Trees reaching heights of twenty to twenty-five feet should be removed.

The view experienced from the visitor parking lot of front lake and the residence above should remain partially obstructed by existing hardwood trees standing on the north side of the lake. This view appears today historically accurate with approximately 40 to 50 percent visual obstruction. It should be maintained through the replacement of any trees lost.

Restoration of the view of Ravenswood from the rock outcrop behind the main house is not feasible. Much of the surrounding woodlands has closed in upon the outcrop. Removal of these trees would be very costly. Management recommendations involving vegetation around the existing outcrop are discussed in the section "Rock Outcrops."

Maintaining the existing view on top of Big Glassy Mountain is recommended by removing trees obstructing the western view. Because most of these trees stand outside

the park boundaries, permission from the adjacent land owner will be necessary.

The view of the side pasture and the goat barn from Little River Road is currently not threatened by existing vegetation. However, it is advisable to continue monitoring the growth and height of trees and shrubs located along the Memminger Creek west branch, which flows into side lake. Should any part of the view be impeded by this vegetation, removal of such is recommended.

ROCK OUTCROPS

General Maintenance Procedures

Recommendations for the management of the rock outcrop near the upper entry drive and summer garden are discussed under the section entitled "Entry Drive". The outcrop atop Big Glassy is discussed above in the section entitled "Views". Other outcrops located throughout the wooded areas of Connemara should be managed through a "hands-off" policy, allowing for successional processes to occur. Only when invasive species such as ivy, privet, or honeysuckle occur on or near the outcrops should actions be taken. Such species should be removed whenever encountered.

The rock outcrop behind the residence requires attention to prevent its disappearance. Figure 6.11 illustrates areas to be managed by periodically removing shrubs and saplings. Removal should occur every five to seven years within the indicated management boundary.

Removal of English ivy and privet is strongly recommended in the area between the outcrop and the amphitheater. Ivy can be controlled and eventually eliminated by hand-pulling for several years until it no longer returns. The section entitled "Control of Exotics" in this chapter contains details on the removal of privet.

INTERPRETATION

Public awareness and understanding of park management is very important to the success of the proposed management program. Interpretation can be provided through one or several of a variety of methods suggested below.

VIDEO--A ten to fifteen minute video presentation could introduce the visitor to the history, philosophy, and management of the Sandburg landscape. The park has the necessary equipment and currently uses video presentations for interpretation inside the main house. The landscape interpretation video could be presented afterwards.

SLIDE PRESENTATION--A slide presentation could provide interpretation of the Connemara landscape for the interested visitor. This would require scheduling and the participation of a park service employee. The video room could be used or the family garage, although physical changes might be necessary to provide appropriate low lighting. Slides are already available.

INTERPRETATION BROCHURES--Maps of the core area, within a bulletin or folder format, could be designed for visitor use on site. Text accompanying sketches and photographs would illustrate how the landscape changed throughout the historic period.

TOURS--A scheduled tour, requiring the participation of a NPS employee, would be most effective in explaining the Sandburg philosophy, management, and history of Connemara. How the park service has chosen to interpret these could be explained on site. A brochure illustrating the historic scenes could enhance a visitor's understanding.

CONCLUSION

The Sandburgs lived a simple and quiet life at Connemara. Busy each day with the goat herd and its needs, Paula Sandburg managed her home in a way which typified millions of Americans' treatment of their landscapes. Some areas were let go; others were maintained sporadically. Changes occurred over time with additions of new plant material, older vegetation dying out, or favorite landscape elements being renewed or reinforced. Overall, there was never enough time or help to manage completely.

The family's appreciation of natural change influenced management decisions at Connemara. Expressions of wildness--new, old, and even dying or dead vegetation--were tolerated and in many instances admired. Paula Sandburg's hand at introducing flowers and shrubs near the house contributed to the ongoing transformation of the landscape.

This study has concluded that constantly changing patterns in the Connemara landscape were typical during the historic period. Such changes were man-made and natural. Through the practice of varying maintenance procedures, relaxing existing management techniques, and introducing a variety of historic plant materials, the author wishes to restore the feeling associated with the historic landscape. As a result, Connemara may express a closer association with the past, and visitors may gain a better understanding of the landscape which Carl Sandburg experienced.

BIBLIOGRAPHY

- Armitage, Allan M. 1989. *Herbaceous Perennial Plants*. Athens, GA: Varsity Press, Inc.
- Arthur, John Preston. 1973. *Western North Carolina: A History, 1730-1913*. Spartanburg, SC: The Reprint Co.
- Barber, Jody, and Louise Bailey. 1988. *Hendersonville and Henderson County: A Pictorial History*. Norfolk: Donning Co. Publishers.
- Blackmum, Ora. 1977. *Western North Carolina: Its Mountains and Its People to 1880*. Boone, NC: Appalachian Consortium Press.
- Bond, James and Kate Tiller, eds. 1987. *Blenheim: A Landscape for a Palace*. London: Alan Sutton Publishing Ltd.
- Boykin, Deas. 1975. "Evaluation Report," sent to Superintendent, Carl Sandburg National Historic Site from Acting Associate Regional Director, Park System Management, SERO, Atlanta, GA, 13 November.
- Callahan, North. 1987. *Carl Sandburg: His Life and His Works*. University Park: The Pennsylvania State University Press.
- Capers, Henry D. 1893. *Life and Times of C. G. Memminger*. Richmond: Everett Waddey Co., Publishers.
- C. G. Memminger Papers. Southern Historical Collection. Library of the University of North Carolina, Chapel Hill.
- Clay, James W., Douglas M. Orr, Jr., and Alfred W. Stuart, eds. 1975. *North Carolina Atlas: Portrait of a Changing Southern State*. Chapel Hill: University of North Carolina Press.
- Connell, Joseph H. and Ralph O. Slatyer. 1977. "Mechanisms of Succession in Natural Communities and Their Role in Community Stability and Organization." *American Naturalist*, 111: 1119-1144.
- Copps, David. 1990. "Between forest and field management of the shrubland sere as songbird habitat at Sandy Creek Nature Center, Athens, Georgia." Master of Landscape Architecture Thesis, University of Georgia.
- Crile, Helga Sandburg. 1991. Letter from Cleveland, Ohio, to author, Athens, Georgia, 6 February.
- English, Ann Elizabeth Knapp. 1988. *The Biltmore Estate: The approach road*. Master of Landscape Architecture Thesis, University of Georgia.
- Fain, James T. 1980. *A Partial History of Henderson County*. New York: Arno Press.
- Firth, Ian. 1985. *Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System*. Department of the Interior, National Park Service Research/Resources Management Report SER-82.
- Foresman, Louise. 1989. Letter to author, Athens GA.
- Fraiser, C. Craig and John C. Paige. 1981. See National Park Service. 1981b.
- Free, Montague. 1961. *Plant Pruning in Pictures*. Garden City: Doubleday and Co., Inc.
- Froeschauer, Peggy Stanley. 1989. *The interpretation and management of an agricultural landscape*. Master of Landscape Architecture Thesis, University of Georgia.

- Gilbert, Cathy A. 1987. See National Park Service. 1987. _____ . "The Tao House Courtyard: Historic Landscape Study and Design Proposal, 1989 (?)" [draft photocopy]. Under the joint direction of the Division of Park Preservation, Western Regional Offices, San Francisco, CA, Eugene O'Neill National Historic Site, and the Cultural Resources Division, Pacific Northwest Regional Office, Seattle, Washington.
- Grese, Robert E. 1984. A process for the interpretation and management of a designed landscape: the landscape art of Jens Jensen at Lincoln Memorial Garden, Springfield, Illinois. Master of Arts Thesis in Landscape Architecture, University of Wisconsin-Madison.
- Green, Byrn. 1985. *Countryside Conservation*. London: George Allen and Unwin.
- Hottes, Alfred Carl. 1956. *The Book of Perennials*. New York: Dodd, Mead and Co.
- _____. 1959. *The Book of Annuals*. New York: Dodd, Mead and Co.
- Hudson, Charles J. 1958. *Hudson's Southern Gardening*. Atlanta: Tupper and Love.
- Johnson, J. Troy. 1990. *Pastures in Georgia*. Cooperative Extension Service, University of Georgia College of Agriculture, Bulletin #573. Athens, GA.
- Lawson, Alexander High. 1968. *Bamboos: A Gardener's Guide to Their Cultivation in Temperate Climates*. New York: Taplinger Publishing Co.
- Leighton, Anne. 1976. *American Gardens of the Eighteenth Century*. Boston: Houghton Mifflin.
- _____. 1987. *American Gardens of the Nineteenth Century*. Amherst: University of Massachusetts Press.
- Marsh, Blanche. 1961. *Historic Flat Rock*. Asheville: Biltmore Press.
- Martin, George A., ed. 1887. *Fences, Gates and Bridges: A Practical Manual*. New York: O. Judd, Co.
- McClelland, Linda Flint, J. Timothy Keller, Genevieve P. Keller, and Robert Z. Melnick. "How to identify, evaluate, and register rural historic landscapes." *National Register Bulletin* 30. Washington, D. C.: Interagency Resources Division, National Park Service.
- Melnick, Robert Z. 1984. See National Park Service. 1984.
- Memminger, Edward Read. 1954. *A Historical Sketch of Flat Rock*. Asheville: Stephens Press.
- Morley, Margaret W. 1913. *The Carolina Mountain*. Boston: Houghton Mifflin.
- National Park Service. 1970. Interpretive Prospectus, Carl Sandburg Home National Historic Site. Eastern Service Center.
- _____. 1971. *Master Plan, Carl Sandburg Home National Historic Site*. Eastern Service Center.
- _____. 1977. *Environmental Assessment, Development Concept Plan, Carl Sandburg Home National Historic Site*. Denver: Denver Service Center.
- _____. 1980. *Development Concept Plan, Carl Sandburg Home National Historic Site*. Denver: Denver Service Center.
- _____. 1981. *Cultural Resources Management Guidelines*. NPS 28. Washington, D. C.: U. S. Department of the Interior.
- _____. 1981. *Historic Structure Report for Carl Sandburg Home National Historic Site*, by C. Craig Fraiser and John C. Paige. Denver: Denver Service Center.
- _____. 1982. *Carl Sandburg Home*. Handbook 117. Washington, D. C.: Division of Publications.
- _____. 1984. *Cultural Landscapes: Rural Historic Districts in the National Park Service*, by Robert Z. Melnick. Washington, D. C.: U. S. Department of the Interior.
- _____. 1985. *Historic Landscape of Fort Spokane: A Design Proposal*. Seattle: Cultural Resources Division, Pacific Northwest Region.

- _____. 1987. *Historic Landscape Report: American Camp and British Camp, San Juan Island National Historical Park*, by Cathy A. Gilbert. Seattle: Cultural Resources Division, Pacific Northwest Region.
- _____. 1989. Visitation statistics of Carl Sandburg Home National Historic Site.
- Nehrling, Arno and Irene Nehrling. 1964. *The Picture Book of Perennials*. New York: Hearthside Press, Inc.
- North Carolina Pamphlet Files. Hendersonville Public Library. Hendersonville, NC.
- Patton, Sadie Smathers. 1961. *A Condensed History of Flat Rock*. Asheville: Church Printing Co.
- Photographic Archives. Carl Sandburg Home National Historic Site, Flat Rock, NC.
- Roberts, Nancy. 1976. The house called Connemara. *Americana*, 4, no. 3: 40-43.
- Rockwell, F. F. and Esther C. Grayson. 1955. *The Complete Book of Annuals*. Garden City: American Garden Guild and Doubleday and Co.
- Sandburg, Carl. Undated letter to Lillian Steichen, as quoted in NPS Handbook 117. 1982. *Carl Sandburg Home*. Washington, D. C.: Division of Publications.
- Sandburg, Carl, Mrs. 1945. Letter from Harbert, Michigan, to Joe Anders, Hendersonville, NC, 5 October. Farm Office, Carl Sandburg Home National Historic Site, Flat Rock, NC.
- Sandburg, Carl, Mrs. 1945. Letter from Harbert, MI, to Joe Anders, Hendersonville, NC, 1 November. Farm Office, Carl Sandburg Home National Historic Site, Flat Rock, NC.
- Shaffer, E. T. H. 1963. *Carolina Gardens*. Devin-Adair Co.
- Steichen, John C. 1990. Letter from Landenberg, PA, to Carey W. Jones, Flat Rock, NC, 2 November. Carl Sandburg Home National Historic Site, Flat Rock NC.
- Steichen, Paula. 1969. *My Connemara*. New York: Harcourt Brace and World, Inc.
- Triggs, Kathleen. 1989. "Paula Sandburg's Herd of Chikaming Dairy Goats." Master of Arts Thesis, Oklahoma State University.
- U. S. Department of Agriculture. Combined Forest Pest Research and Development Program. 1978A. "Defoliation by the Gypsy Moth: How it Hurts Your Tree," by Philip M. Wargo. Home and Garden Bulletin #223. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.
- _____. Combined Forest Pest Research and Development Program. 1978B. "Southern Pine Beetles Can Kill Your Ornamental Pine," by Robert C. Thatcher, Jack K. Coster, and Thomas L. Payne. Home and Garden Bulletin #226. Washington, D.C.: Superintendent of Documents, U. S. Government Printing Office.
- _____. Combined Forest Pest Research and Development Program. 1980. "Silviculture Can Reduce Losses from the Southern Pine Beetle," by Roger P. Belanger and Barry F. Malac. Agriculture Handbook #576. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.
- _____. Forest Service. 1989. "Gypsy Moth," by M. McManus, N. Schneeberger, R. Reardon, and G. Mason. Forest Insect Disease Leaflet #162. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.
- U.S. Department of the Interior. Heritage Conservation and Recreation Service. 1979. "The Secretary of Interior's Standards for Historic Preservation Projects," by W. Brown Morton III and Gary L. Hume. Washington, D.C.: Technical Preservation Services Division.
- Waite, W.H. 1931. *Modern Dahlia Culture*. New York: De La Mare Co., Inc.
- Wister, John C., ed. 1947. *Woman's Home Companion Garden Book*. New York: P.F. Collier and Son Publishers.

Zeichner, Lauren Lubin. 1988. "Landscape Management Plan for Dungeness," Cumberland Island National Seashore. Master of Landscape Architecture Thesis, University of Georgia.

INTERVIEWS

- Crile, Helga Sandburg. 1989. Interview by author, 13 September, Cleveland, OH. Tape recording. Carl Sandburg Home National Historic Site, Flat Rock, NC.
- Ducker, Austin. 1989. Interview by author, 8 November, Flat Rock, NC.
- Freeman, Sabrina. 1990. Interview by author, 14 June, Flat Rock, NC.
- Hamn, Charles. 1989. Interview by author, 25 October, Flat Rock, NC. Tape recording. Carl Sandburg Home National Historic Site, Flat Rock, NC.
- King, Lewis. 1990. Interview by author, 2 August, Flat Rock, NC.
- Polega, Paula Steichen. 1989a. Interview by author, 19 July, Flat Rock, NC.
- Polega, Paula Steichen. 1989b. Interview by author, 7 November, Flat Rock, NC.
- Sandburg, Margaret. 1989. Interview by author, 8 September, Asheville, NC. Tape recording. Carl Sandburg Home National Historic Site, Flat Rock, NC.
- Sitton, Edna. 1990. Interview by author, 16 June, Flat Rock, NC.
- Ward, Don. 1989. Interview with author, 8 November, Flat Rock, NC.
- Weber, Warren, Chief Interpreter, Carl Sandburg Home National Historic Site. 1990. Interview by author, 8 February, Flat Rock, NC.

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APPENDIX A

The seven aspects of integrity as defined by Firth (1985, 10-15) include:

Location--The boundaries or geographic distribution of a biotic cultural resource. This includes edges of gardens, pastures, woodlands, etc.

Species Composition--The dominant and introduced species which were the focus of management activities in the historic period. Identification of species should include varieties of plants, breeds of animals, and origins of species. A description of physical characteristics should accompany the identification.

Community Organization--The size, structure and distribution of plant and animal populations, and their cyclical patterns. Population analysis considers age, sex, size, etc. Distributions are described in terms of a fixed layout, a general density or a movement between points. Cyclical patterns must also be considered as they will affect size, structure and distribution of plant and animal populations.

Management Techniques--Species composition and community organization are controlled by management techniques. Various land management systems, such as horticulture, silviculture and agriculture, employ a variety of techniques. They include regeneration, intermediate care, protection, harvest, and use. Physical characteristics of a biotic community reflect the management techniques, the types of equipment used, and the timing of the management activities.

Setting--The physical environment of a managed biotic community, including natural resources and cultural resources. Natural resources include air, water, wildlife and landforms. Cultural resources include managed biotic communities and buildings, structures and objects. Neighboring communities are also included in the physical setting.

Feeling--The ability of a cultural resource to evoke a sense of the past. This includes sounds, smell, views, and rhythm (diurnal, monthly and seasonal). This sensory aspect can be based on an assessment of its integrity under the first five criteria--location, species composition, community organization, management techniques, and setting.

Association--The connection between a biotic community and the people, events or developments of the historic period. This is a summation of all the previous categories of integrity.

APPENDIX B

SUGGESTED PLANTINGS FOR SUMMER GARDEN

The following list contains period plants from which to choose for planting in Margaret's summer garden. Several cultivars of species have been listed in order to provide choices for varying plantings from year to year. This list focuses on species popular during the 1950s and 1960s, plants documented to have been planted by the Sandburgs, and species found marked in nursery catalogs in the Sandburg Farm Office, CARL. Sources were 1) seed catalogs including *Park's Flower Book*, 1964, George W. Park Seed Co., Greenwood, SC; *Burpee Seeds*, 1962, W. Atlee Burpee Co., Seed Growers, Philadelphia, PA; *Vaughan's Garden Illustrated*, 84th anniversary, 1960, Chicago, IL; *Vaughan's Fall Bulbs*, 1958, Fall Edition of *Vaughan's Garden Illustrated*, Chicago, IL; *Vaughan's Gardening Illustrated*, 1962, 86th Anniversary, Chicago, IL; *The Book of Annuals* by Carl Hottes, 1959; *The Book of Perennials* by Carl Hottes, 1956; and *Hudson's Southern Gardening*, 1958, by Charles J. Hudson.

BOTANICAL NAME

Anchusa azurea 'Dropmore'
 Aquilegia alpina
 Aquilegia canadensis
 Aquilegia coerulea
 Asclepias tuberosa
 Aster novae-angliae 'September Ruby'
 Aster novi-belgii
 Campanula carpatia
 Campanula medium
 (blue, rose, white)
 Chrysanthemum coccineum
 'Roseum'
 'Giant Rose'
 'Giant White'
 'James Kelway'
 Chrysanthemum leucanthemum
 Chrysanthemum x morifolium

COMMON NAME

Anchusa
 Alpine Columbine
 Canadian Columbine
 Rocky Mountain Columbine
 Butterfly Weed
 New England Aster
 Michelmas Daisy
 Carpathian Harebell
 Canterbury Bells

 Painted Daisy or
 Pyrethrum

 Oxeye Daisy
 Chrysanthemum

'Bronze Queen'
'Flamboyant' (bronze)
'Morocco' (red)
'Royalist' (red)
'Butterscotch'
Chrysanthemum parthenium
Chrysanthemum x superbum 'Alaska'
Cleome spinosa 'Pink Queen'
Convallaria majalis
Cornus florida
Coreopsis grandiflora
Cosmos bipinnatus
 'Fiesta'
 'Sensation'
 'Dazzler'
 'Pink Purity'
Delphinium elatum
 Connecticut Yankee Series (all shades)
Dianthus barbatus
Dianthus deltoides
Dianthus plumarius
 'Mrs. Sinkins'
 'Essex Witch'
Digitalis x mertonensis
Digitalis purpurea
Dicentra spectabilis
Echinacea purpurea
Gaillardia aristata
Gypsophila paniculata
Helichrysum 'Monstrosum'
Hemerocallis fulva
Hemerocallis lillo-asphodelus
Hemerocallis x hybrida
 'Artic North' (cream)
 'Aurea'
 'Betty Coed'

'White Avalanche'
'Powder Puff' (white)
'Alert' (dk purple)
'Helen Bogue' (purple)
'Pathfinder' (yellow)
Matricaria or *Feverfew*
Shasta Daisy
Cleome
Lily of the Valley
Dogwood
Coreopsis
Cosmos

Delphinium

Sweet William
Maiden Pinks
Grass Pinks

Strawberry Foxglove
Common Foxglove
Bleeding Heart
Purple Coneflower
Gaillardia or *Blanket Flower*
Baby's Breath
Strawflower
Tawny Daylily
Lemon Daylily
Hybrid Daylilies
'Coral Mist'
'Evelyn Claar' (pink)
'Flame Fagot'

'Cartwheels'
 'Cheery Pink'
 'Come Hither'
 'Coral Crab'

Heuchera sanguinea

Hyacinth orientalis var. *albulus*

Hymenocallis narcissiflora

Iberis sempervirens

Ilex opaca

Iris "Bearded Hybrids"

Bearded Iris

'Blue Rhythm'	'Iridescence' (pink)
'Blue Sapphire'	'Pink Bountiful'
'Blue Shimmer'	'Pink Cameo'
'Jane Phillips' (blue)	'Starshine' (cream)
'Argus Pheasant' (copper)	'Cherie' (pink)
'Solid Mahogany' (red)	'Ebony Echo' (dk red)
'Solid Gold'	'June Bride' (apricot)
'Casa Morena' (copper)	'Ola-Kala' (yellow)
'Cathedral Bells' (pink)	'Top Flight'
'Golden Garland'	

Iris siberica

Lathyrus odoratus

Leucojum vernum

Leucojum aestivum

Ligustrum vulgare

Lilium trigrinum

Lunaria annua

Myosotis scorpioides

Narcissus jonquilla var. *simplex*

Narcissus jonquilla var. *flore-pleno*

Narcissus 'Golden Harvest'

'Mrs. E.H. Krelage'

'King Alfred'

'Beersheba'

Narcissus poeticus

Narcissus poeticus 'Actaea'

'Frans Hals' (orange)

'Garden Portrait' (yellow)

'Golden Dewdrop'

Coral Bells

Common Hyacinth

Ismene or Peruvian Daffodil

Candytuft

American Holly

Siberian Iris

Sweet Pea

Spring Snowflake

Summer Snowflake

Common Privet

Tiger Lily

Honesty

Forget-me-nots

Jonquil

Jonquil

Trumpet daffodils

Daffodil

Pheasants Eye

Ornithogalum umbellatum

Paeonia lactiflora

'Touragelle' (white)

'M. Martin Cahuzac' (red)

'Walter Faxon' (pink)

'Festiva Maxima' (white)

'Karl Rosenfield' (red)

'Sarah Bernhardt' (pink)

Phlox divaricata

Phlox paniculata (purple)

'White Admiral'

'Sir John Falstaff' (pink)

'Lillian' (pink)

Phlox subulata

'White Delight'

'Vivid'

'Emerald Pink'

'Scarlet Flame'

Pinus strobus

Platycodon grandiflorus

Primula x Bullesiana

Primula japonica

Primula juliae (purple)

Primula veris (yellow)

Primula vulgaris (yellow)

Prunus glandulosa 'Rosea' (pink)

Ranunculus repens

Rhododendron calendulaceum (orange/red)

Rosa 'Hybrida'

'Dorothy Perkins' (pink)

'Crimson Rambler'

'Dr. W. Van Fleet' (pink)

'Red Cherokee'

'Indispensable' (pink)

'Marechal Neil' (yellow)

'Talisman'

Star-of-Bethlehem

Chinese Peony

'Martha Bulloch' (pink)

'Richard Carvel' (red)

'Felix Crousse' (red)

'Edulis Superba' (pink)

'Mme. de Verneville' (rose white)

Woodland Phlox

Garden Phlox

Moss Phlox

White Pine

Bellflowers

Primrose

Japanese Primrose

Julian Primrose

Cowslip Primrose

English Primrose

Dwarf Flowering 'Alboplena' (white) Almond

Creeping Buttercups

Flame Azalea

Climbing Roses

Rosa rugosa 'Red Grootendorst'

'Pink Grootendorst'

Rosa Sp.

'Charlotte Armstrong' (red)

'Crimson Glory' (red)

'Eclipse' (yellow)

'Peace' (yellow)

'New Yorker' (red)

'Curly Pink'

'Helen Traubel' (pink)

'Tiffany' (pink)

Salvia farinacea

Shortia galacifolia

Spiraea x bumalda 'Anthony Waterer'

Spiraea x bumalda 'Frobelii'

Spiraea prunifolia

Spiraea thunbergi

Spiraea x Vanhouttei

Stokesia laevis

Tropaeolum majus var. *burpeei*

Vinca minor

Viola cornuta

'Jersy Gem'

'Campanula Blue'

'Scottish Yellow'

'Avalanche'

Viola odorata 'Czar'

'Queen Charlotte'

Rugosa Rose

Hybrid Teas

Blue Salvia

Shortia

Anthony Waterer Spirea

Froebelii Spirea

Bridal Wreath

Thunberg Spirea

Van Houttei Spirea

Stokes aster

Golden Gleam Nasturtium

Periwinkle

'Arkwright Ruby' Tufted Violets

Sweet Violets

APPENDIX C

SUGGESTED PLANTINGS FOR DAHLIA/ZINNIA BED

DAHLIAS

Pinks and reds are recommended. Some whites and yellows have been added for variety. Simpler varieties, suggested by Paula Polega, are included under Anemones and Singles and Semi-doubles. Abbreviations include F.D. (Formal Decorative); G.D. (Giant Decorative); I.D. (Informal Decorative); and M.F.D. (Miniature Formal Decorative). Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

Decoratives

'Barbarosa' (red) F.D.
'Cardinal' (red) G.D.
'D-Day' (pink) F.D.
'Gertrude Britten' (red) F.D.
'Golden Eclipse' (yellow) F.D.
'Ogden Reid' (rose pink) F.D.
'Victory' (pink w/ gold) F.D.
'Jane Cowl' (gold) I.D.
'Jean Kerr' (white) F.D.
'Mrs. I. de ver Warner' (lilac) F.D.

Pompons

'Yellow Gem' (yellow)

'Little Edith' (yellow)
'Betty Ann' (pink)
'Routhout' (red)
'Rosa Wilmoth' (pink)

Anemones

'Roulette' (pink)
'Honey' (gold)
'Bridesmaid' (white)

Miniatures

'Yellow Kitten' (yellow) M.F.D.
'Ike' (red) M.F.D.
'Baby Fontaneau' (pink) M.F.D.
'White Fawn' (white) M.F.D.

Singles and Semi-doubles

'Unwin Dwarf Hybrids'
'Mignon Hybrids'

ZINNIAS

Among "Cut and Come Again" varieties recommended by Paula Polega, graduated sizes are given to provide species variety where zinnias are suggested.

Giant Flowered and California Giants (2-3' tall, flowers to 6" across)

- 'Canary Bird' (primrose)
- 'Cherry Queen'
- 'Crimson Monarch'
- 'Dream' (lavender)
- 'Exquisite' (rose)
- 'Isabellina' (yellow)
- 'Miss Willmot' (pink)
- 'Polar Bear' (white)
- 'Royal Purple'
- 'Will Rogers' (red)
- 'Pink Lady'
- 'Brightness' (pink)
- 'Daffodil Queen' (yellow)
- 'Lavender Queen'
- 'Salmon Queen'
- 'Scarlet Queen'
- 'Snow Queen' (white)

Cut and Come Again

(1-2' tall, flowers 2-3")

- 'Snowball'
- 'Watermelon Pink'
- 'Pinkle'

Lilliput (Pompon or baby)

(12-18" tall, flowers 1-2")

- 'Bright Pink'
- 'Canary Yellow'
- 'Rose Bud'
- 'Salmon Rose Gem'

'White Gem'
'Peach Blossom'
'Rose Gem'
'Scarlet Gem'
'Thumbellina' (4-6" tall)
'Tom Thumb Gem' (4-6" tall)

MARIGOLDS (*Tagetes* sp.)

A variety of sizes and types are listed below of the African (*T. erecta*) and French (*T. patula*) marigolds.

Carnation Flowered:

'Yellow Supreme'--2'.
'Guinea Gold'--2'.
'Man-in-the-Moon'--3'. Pale yellow.
'Sunset Giants'--3-4'. Cream, lemon, buff, gold, orange.
'California Gold'--2-3'. Orange.
'Toreador'--2'. Orange.
'Real Gold'--2'. Orange.
'Crackerjack'--3-4'. Yellow, orange, gold.

Chrysanthemum Flowered:

'Mammoth Mum'--2-3'. Yellow.
'Spun Gold'--1'.
'Cupid'--8". Yellow. (Dwarf)
'Cupid Golden'--8". (Dwarf)
'Cupid Orange'--8". (Dwarf)

Dwarf French Singles

'Flash'--18". Red to bronze.
'Sunny'--15". Yellow.

Dwarf French Doubles:

'Yellow Pigmy'--8".
'Spry'--9". Yellow.
'Harmony'--6". Orange. (Petite)

'Sunkist'--6-8". Orange
'Tangerine'--15".

APPENDIX D

SUGGESTED PLANTINGS FOR FRONT YARD FENCE LINE

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

BOTANICAL NAME

Buddleia davidii var. *magnifica*
Chaenomeles speciosa
Cotinus coggygria
Forsythia 'Lynwood Gold'
Forsythia 'Beatrix Ferrand'
Lonicera korolkowii
Rosa rugosa
 'Red Grootendorst'
 'Pink Grootendorst'
Spiraea x bumalda 'Anthony Waterer'
Spiraea prunifolia
Tamarix parviflora
Philadelphus coronarius
Weigela florida
 'Rosea' (pink)
 'Vanicek' (red)
 'Eva Rathke' (red)

COMMON NAME

Buddleia
 Flowering Quince
 Smoketree
 Forsythia
 Forsythia
 Blueleaf Honeysuckle
 Rugosa Rose

 A. Waterer Spirea
 Bridalwreath Spirea
 Tamarix
 Mockorange
 Weigela

APPENDIX E

SUGGESTED PLANTINGS FOR NORTH FOUNDATION BED

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

BOTANICAL NAME

Abelia grandiflora
Antirrhinum majus
 'Tetraploid hybrids'
 'Rocket Series'
Arborvitae occidentalis
Arborvitae orientalis
Hedera helix 'Baltica'
Osmunda cinnamomea
Rhododendron obtusum var. *kaempferi*

Spiraea prunifolia

COMMON NAME

Abelia
Snapdragons

Western Arborvitae
Eastern Arborvitae
Baltic Ivy
Cinnamon Fern
Kaempferi Hybrid
Azaleas
Bridalwreath
Spiraea

APPENDIX F

SUGGESTED PLANTINGS FOR EAST FOUNDATION BED

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

BOTANICAL NAME	COMMON NAME
<i>Acuba japonica</i>	Acuba
<i>Aster tataricus</i>	Tatarian Daisy
<i>Chrysanthemum x morifolium</i>	Chrysanthemum
<i>Chrysanthemum x superbum</i> 'Alaska'	Shasta Daisy
<i>Cleome spinosa</i> 'Pink Queen'	Cleome
<i>Digitalis x mertonensis</i>	Strawberry Foxglove
<i>Hedera helix</i> 'Baltica'	Baltic Ivy
<i>Hemerocallis x hybrida</i>	Hybrid Daylilies
(See listing under Summer Garden)	
<i>Hibiscus syriacus</i>	Rose-of-Sharon
<i>Impatiens wallerana</i>	Impatiens, Sultans
'Pink Baby'	
'White Baby'	
'The Rose'	
<i>Ipomea tricolor</i>	Morning glory
'Heavenly Blue'	
'Pearly Gates'	
'Scarlett O'Hara'	
<i>Iris</i> 'Bearded Hybrids'	Bearded Iris
<i>Liriope muscari</i>	Lilyturf
<i>Nandina domestica</i>	Nandina

Narcissus 'Hybrida'

(See listing in Summer Garden)

Narcissus poeticus

Narcissus poeticus 'Actaea'

Osmunda cinnamomea

Tagetes sp.

(See listing under Front Yard Fence Line)

Trumpet

Daffodils

Daffodil

Pheasants Eye

Cinnamon Fern

Marigolds

APPENDIX G

SUGGESTED PLANTINGS FOR SOUTH FOUNDATION BED

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

BOTANICAL NAME

Albizia julibrissin
Chrysanthemum x superbum
Cleome spinosa 'Pink Queen'
Coreopsis grandiflora
Dahlia sp.

(See listing under *Dahlia* / *Zinnia* Bed)(decoratives)

Digitalis x mertonensis
Hedera helix 'Baltica'
Heliopsis helianthoides
Heliopsis
Hemerocallis fulva
Hemerocallis x hybrida
Hemerocallis lilio-asphodelus
Hybiscus syriacus
 Iris 'Bearded Hybrids'
Leucojum vernum
Mahonia aquifolium
Nandina domestica
Narcissus sp.
Osmunda cinnamomea
Rhododendron calendulaceum

COMMON NAME

Mimosa
 Shasta Daisy
 Cleome
 Coreopsis

Strawberry Foxglove
 Baltic Ivy
 Sunflower

Tawny Lily
 Hybrid Daylilies
 Lemon Lily
 Rose-of-Sharon
 Bearded Iris
 Spring Snowflake
 Oregon Grapeholly
 Nandina
 Daffodils
 Cinnamon Fern
 Flame Azalea

Rhododendron molle 'Hybrida'
Rhododendron obtusum
Rhododendron carolinianum
Tagetes sp.
Vinca minor
Vinca rosea

Mollis Azalea
Kurume Azalea
Carolina Rhododendron
Marigolds
Periwinkle
Madagascar Periwinkle

APPENDIX H

SUGGESTED PLANTINGS FOR WEST FOUNDATION BED

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<i>Campsis radicans</i>	Trumpet Vine
<i>Hedera helix</i>	English Ivy
<i>Impatiens wallerana</i>	Impatiens
(See listing under East Foundation Bed)	
<i>Petunia hybrida</i>	Petunia
Hybrid Multifloras	
Hybrid Grandifloras	
'Ballerina' (pink)	
'Firedance' (red)	
'La Paloma' (white)	
'Maytime' (salmon)	
<i>Salvia farinacea</i>	Blue Salvia
<i>Salvia splendens</i>	Scarlet Sage
'Toreador'	
<i>Vinca rosea</i>	Madagascar Periwinkle
<i>Vinca rose</i> var. <i>alba</i>	Madagascar Periwinkle

APPENDIX I

SUGGESTED PLANTINGS FOR LILY GARDEN

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<i>Aesclepias tuberosa</i>	Butterfly Weed
<i>Buxus sempervirens</i>	Am. Boxwood
<i>Chrysanthemum x morifolium</i> (See listing in Summer Garden)	Chrysanthemum
<i>Chrysanthemum x superbum</i> 'Alaska'	Shasta Daisy
<i>Dahlia</i> sp. (See listing in Dahlia/Zinnia Bed)(Decoratives)	Dahlia
<i>Delphinium elatum</i> Connecticut Yankee Blue Series (all shades)	Delphinium
<i>Hemerocallis fulva</i>	Tawny Daylily
<i>Hemerocallis lillo-asphodelus</i>	Lemon Daylily
<i>Impatiens wallerana</i>	Impatiens
<i>Lobularia maritima</i> 'Little Gem' 'Royal Carpet' 'Maritimum'	Sweet Alyssum
<i>Ranunculus repens</i>	Creeping Buttercups
<i>Rosa</i> sp. (See listing in Summer Garden)	Hybrid Tea Rose
<i>Lilium auratum</i> Gold Band Lily 'Album' 'Rubrum'	White Japanese Lily

<i>Lilium candidum</i>	Madonna Lily
<i>Lilium henryi</i>	Henry Lily
<i>Lilium regale</i>	Regal Lily (also)
'Album'	
<i>Lilium rubrum</i>	Japanese Lily
<i>Lilium pumilum</i> (<i>L. tenuifolium</i>)	Coral Lily
<i>Lilium tigrinum</i>	Tiger Lily
<i>Lilium</i> 'Mid-Century Hybrids'	Hybrid Lilies
'Fireflame'	
'Parade'	
'Tangelo'	
'Vagabond'	
<i>Lilium</i> 'Aurelian Hybrids'	Hybrid Lilies
'Heart's Desire'	
'Sunburst'	
'Golden Clarion'	
<i>Petunia hybrida</i>	Petunia
Hybrid Multifloras	
Hybrid Grandifloras	
'Ballerina' (pink)	
'Firedance' (red)	
'La Paloma' (white)	
'Maytime' (salmon)	
<i>Tagetes</i> sp.	Marigold
(See listing in Dahlia/Zinnia Bed)	
<i>Vinca rosea</i>	Madagascar Periwinkle
<i>Zinnia</i> sp.	Zinnia
'Cut and Come Again' varieties	

APPENDIX J

SUGGESTED PLANTINGS FOR FARM MANAGER'S HOUSE AREA

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<i>Buxus sempervirens</i>	American Boxwood
<i>Forsythia intermedia</i>	Forsythia
<i>Hosta fortunei</i>	Blue Plaintain-lily
<i>Hosta caerulea</i>	Tall Cluster Plaintain-lily
<i>Hibiscus syriacus</i> (single flowered only)	Rose-of-Sharon
'Coelestis' (violet-blue)	
'Glenwood's Favorite' (white, crimson center)	
'Hamabo' (blush, carmine blotched)	
'Lady Stanley' (pale pink, carmine blotched)	
'Monstrosa' (white, purple center)	
'Purity' (white)	
'Wm. R. Smith' (white)	
Various hardwood trees including:	
<i>Acer pensylvanicum</i>	Striped Maple
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Carya cordiformis</i>	Bitternut Hickory
<i>Carya ovata</i>	Shagbark Hickory
<i>Carya tomentosa</i>	Mockernut Hickory
<i>Cercis canadensis</i>	Redbud
<i>Liriodendrum tulipifera</i>	Yellow Poplar
<i>Quercus alba</i>	White Oak
<i>Quercus montana</i>	Chestnut Oak

APPENDIX K

SUGGESTED PLANTINGS FOR SPRING GARDEN

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

BOTANICAL NAME

Narcissus jonquilla var. *simplex*
Narcissus jonquilla var. *flore-pleno*
Narcissus 'Golden Harvest'
 'Mrs. E.H. Krelage'
 'King Alfred'
 Beersheba'
Narcissus poeticus
Narcissus poeticus 'Actaea'

COMMON NAME

Jonquil
Jonquil
Trumpet daffodils

Daffodil
Pheasants Eye

APPENDIX L

RECOMMENDED LIST FOR VEGETABLE GARDEN

Recommendations for this list are based on family photographs found in the historic archives, CARL, from recommendations given by family members through interviews or drawings, and from species typical of the 1950s and 1960s as found in sources listed in Appendix B.

Artichoke--Green Globe.

Asparagus--Mary Washington.

Beets--Perfected Detroit; Winterkeeper, Crosby's Egyptian (popular early beet); Detroit Dark Red, medium top.

Broccoli--(Italian green sprouting) Calabrese.

Cabbage--(standard varieties) Copenhagen Market; Early Jersey Wakefield; Danish Ballhead Short Stem.

Carrots--Touchon and long orange.

Cauliflower--Vaughan's Select Snowball.

Celeriac--Large Smooth Prague.

Celery--Easy Blanching Full Heart; Giant Pascal.

Collards--Georgia or Southern.

Corn--Hybrid varieties including Golden Cross Bantam and Golden Midget Hybrid. Open pollinated varieties include Bolden Bantam, Blanck Mexican, and Calico, Indian or Squaw (decorative corn).

Dandelion--(thick leaf or cabbage variety).

Endive--Broad-leaved Batavian White Escarole (Florida full heart).

Gourds--mixed varieties, small fruited.

Honeydew melon.

Kohlrabi--Early Purple Vienna.

Lettuce--Leaf varieties including Ruby (bright red, showy) and Oak Leaf. Butterhead varieties including Matchless Lettuce.

Crisp head varieties including Imperial. Romaine or Cos varieties including Paris White or Trianon.

Lima beans--Baby Fordhook (bush), King of the Garden (pole).

Mangel Wurzel--Mammoth Long Red.

Mustard--Green Wave; Giant Southern (curled long standing).

Parsley--Champion Moss Curled; Plain or Italian.

Parsnips--Hollow Crown (long smooth).

Polebeans--Kentucky Wonder (rust resistant); Kentucky Wonder Wax

Pumpkins--Small Sugar or Pie.

Radishes--Vick's Scarlet Globe; Long Black Spanish; White Chinese or Celestial (last two are fall and winter radishes)
winter radishes--Chinese Mammoth or Celestial. Also Icicle radish/Icicle Rangers and Earl Scarlet Globe Select.

Rutabagas--American Purple Top (1963) and Improved American Purple Top

Snapbeans--Bountiful (popular broad, flat bean).

Spinach--Hybrid Spinach #7 (upright and semi-compact); Bloomsdale long standing; New Zealand Spinach (*Tetragonia expansa*).

Squash--Winter varieties including Blue Hubbard. Summer varieties including Black Zucchini (bush type), Italian Green or Gray Zucchini, Cocozelle (Italian vegetable marrow), Mammoth White Bush, Prolific Straightneck, Giant Yellow Summer Crookneck.

Swiss chard--Lucullus; Rhubarb Chard.

Watermelons--Dixie Queen; Tom Watson.

APPENDIX M

PLANT SOURCES

NURSERIES

Select Seeds
81 Stickney Hill Rd.
Union, CT 06076
(Heirloom plants, annuals and perennials)

McClure & Zimmerman
108 W. Winnebago
P.O. Box 368
Friesland, WI 53935
(bulbs)

Park Seed Co.
Cokesbury Road
Greenwood, SC 29647-0001
(annuals and perennials)

Seeds Blum
Idaho City Stage
Boise, Idaho 83706
(Heirloom vegetables and perennials)

Johnny's Selected Seeds
Foss Hill Road
Albion, ME 04910
(Vegetables)

Hastings
Seedsman to the South
1036 White St., S.W.
Atlanta, GA 30310-8535
(vegetables)

Holbrook Farm and Nursery
Rt. 2, Box 223B
Fletcher, NC 28732
(annuals and perennials)

W. Atlee Burpee and Co.
Warminster, PA 18974
(annuals and perennials)

Gilbert H. Wild and Son, Inc
H--1090 Joplin St.
Sarcoie, MO 64862

Goodness Grows, Inc.
156 South Woodlawn Dr.
P.O. Box 576
Crawford, GA 30630
(perennials)

SOURCES FOR INFORMATION

Antique Plant Newsletter
Dr. Arthur O. Tucker
C/O Department of Agriculture and Natural Resources
Delaware State College
Dover, DE 19901

Association for the Preservation of Virginia Antiquities
2300 East Grace St.
Richmond, VA 23223

BOOKS--

Garden Seed Inventory, compiled by Kent Whealy. 1988.

Seed Saver Publications, Rural Route 3, Box 239,
Decorah, Iowa. Listing all non-hybrid vegetable seeds
still available in the United States and Canada.

SOCIETIES FOR PLANT PRESERVATION--

Southern Garden History Association
Old Salem, Inc.
Drawer F, Salem Station
Winston-Salem, NC 27101

APPENDIX N
MANAGEMENT TIMELINE

AREA	YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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[illegible]

4. Replant boxwood x
5. Cut grass to 3" x x x x x x x x x x x x x x x x x x x x
after 4-6" height

Amphitheater

6. Plant rhododendron x
for screening
7. Install paths to x
amphitheater

F. Main House--South Side
Foundation Bed

1. Install Plan A x x

Bird Feeding Area

2. Fill feeders x x x x x x x x x x x x x x x x x x x x
daily
3. Cut grass to 3" x x x x x x x x x x x x x x x x x x x x
after 4-6" height
4. Return cement x
bird bath to area
5. Thin azaleas and x x x x x x x x x x x x
rhododendron 1/3

G. Main House--West Side
Foundation Bed

1. Cut grass to 3" x x x x x x x x x x x x x x x x x x x x
after 4-6" height
2. Replant trumpet vine x
3. Plant annuals x x x x x x x x x x x x x x x x x x x x

Magnolia/Ginkgo Area

4. Replant boxwood hedge x
5. Trim hedge lightly x x
6. Replace star magnolia x
with like kind

7. Trim conical boxwood lightly		x			x				x											x
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8. Prune hydrangeas and nandinas		x			x				x											x
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9. Thin forsythia and Japanese quince	x					x							x						x	
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H. Chicken House Area

1. Encourage vines on fences. Thin periodically						x													xx	
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2. Cut grass to 3" after 6-8" height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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3. Maintain existing removal of herbaceous sp. 2-3 times annually	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	xx
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4. Replant rose-of-sharon at gate entrance.																			x	
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5. Plant ferns and iris next to garage																			x	
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6. Replant trumpet vine	x																			
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I. Tenant House

1. Cut grass to 3" after 4-6" height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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2. Remove privet	x	x	x	x	x						x								xx	
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3. Replant hemlock	x																			
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J. Spring Garden

1. Cut grass to 3" after 4-6" height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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2. Replant box hedge						x														
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3. Plant bulbs in spring garden	x					x					x					x				x
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4. Mow in winter	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
K. Vegetable Garden																				
1. Plant vegetables	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2. Rotate garden location; plant legumes in old bed	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3. Mow grass monthly	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4. Allow tall grasses at fence line	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
L. Farm Manager's House																				
1. Cut grass to 3" after 4-6" height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2. Plant hardwoods.	x	x	x																	
3. Discontinue mowing.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4. Plant rose-of-sharon	x																			
M. Goat Barn																				
1. Cut grass to 3" after 4-6" height	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2. Plant elm tree	x																			
3. Allow tall grasses at fence line	x	x	x	x	x	x	x	x	x	x	x	x	xxxxxxxx							
N. Apple Orchard																				
1. Mow annually	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
O. Trout Pond																				
1. Clean out pond			x			x			x			x			x			x		
2. Remove veg. along pond edges						x					x				x					x

1. Clean out pond	x	x	x	x	x	x
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1. Dredge	x	x
-----------	---	---

2. Remove milfoil x x x x x x x x x x x x x x x x x x x x

1. Remove existing sod x
& plant grass/clover mix

2. Restore clovers by seeding over sod	x	x	x
----------------------------------------	---	---	---

3. Maintain at 4" height x x x x x x x x x x x x x x x x x xxx

4. Remove saplings and vines from fence lines	x	x	x	x	xx
-----------------------------------------------	---	---	---	---	----

1. Dredge	x	x	x
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2. Remove waterlilies	x	x	xx
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1. Remove existing sod x
& plant grass/alfalfa
mixture

2. Mow monthly to 4" x x x x x x x x x x x x x x x x x x x x x x

3. Maintain pH 6.5

4. Remove vines and saplings from fence lines	x	x	x	x	x	x
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1. Remove honey-suckle & privet where found

V. Mountain Reservoir

1. Clean out pond	x		x		xx
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W. Views

Front Porch

1. See Fig. 6.10 for management details

Big Glassy

2. Remove trees obstructing view	x		x
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Side Pastures

3. Remove trees blocking view of pastures and goat barn from Little River Road		x		x
--------------------------------------------------------------------------------	--	---	--	---

Parking Lot

4. Maintain 40-50% filtered view. Replace lost trees with like kind.		x		x
----------------------------------------------------------------------	--	---	--	---

X. Rock Outcrops

Behind Residence

1. Remove shrubs & trees within mgmt. boundary line		x		x		x						
2. Remove privet and ivy.	x	x	x	x	x	x	x	x	x	x	x	x

NOTES:

1. This timeline represents a general guide to management at Connemara. Recommendation intervals are considered flexible to suit the availability of resources of the park.

2. Documented historic species should be replaced with like-kind unless otherwise indicated.

3. See Chapter Six for details of management recommendations.

APPENDIX O

The following lists are compiled from various sources at the photographic and farm archives of Carl Sandburg Home National Historic Site. They are included here as references upon which the plant lists in Appendices K-L were based.

1. Paula Steichen Polega's plant list for the Summer Garden:

privet	holly	periwinkle	dogwood
pine	perennial phlox	forget-me-nots	foxgloves
bleeding heart	coral bells	bellflowers	anchusa dropmore
irises	daylilies	primrose	violas
peonies	delphiniums	daffodils	narcissus
shrub rose	shasta daisies	butterfly weed	oxeye daisies
buttercups	coreopsis	phlox	chrysanthemums
climbing roses			

2. Margaret Sandburg's plant list for the Summer Garden:

iris	cleome	shasta daisy	Ct. Yankee delphinium
foxgloves	stokesia	pinks	sweet william
spirea (white)	peonies	canterbury bells	white candytuft
bleeding heart	shortia	columbine	summer tiger lilies
dogwood	lemon lilies	lady's slippers	pink spirea Froebeli
periwinkle	snowball	rhododendron	bridalwreath spirea
cosmos	zinnias	phlox	flowering almond
marigold	coneflowers	matricaria	wild orange azalea
ismene	narcissus	daffodils	A. Waterer spirea
snowflakes	primrose (red, yellow, purple)		

3. Hand-drawn planting plan for front yard fence row (author unknown) Included are comments found on the drawing:

vine roses
 old...spirea
 weigela Lindsay
 purple buddleia
 old forsythia
 forsythia Beatrix Ferrand
 tamarix----died
 snowflake mock orange
 (2) forsythia Lynwood Gold
 scarlet flowering quince
 cardinal weigela----good
 forsythia B. Ferrand
 smoke tree----too big, no flowers
 forsythia Lindsay
 pink honeysuckle, hedge type
 smoke tree----too big, no flowers
 4 old roses

(in different ink:)

new daylily	gloriosa daisy	speciosa lily
regal lily	anchusa italian	new daylily
s___lily	campanula	

(in pencil:)

one lupine survived winter of 1961
 azalea
 canterbury bells
 one columbine survived
 one fern

4. Plants ordered from George W. Park Seed Co., Greenwood, SC, January 7, 1969:

achimene Purple King
achimene Rare Double
achimene Crimson Glory
achimene Golden Heart

5. Plants listed on unnamed order form:

8 Champion DAHLIA varieties* rainbow colors:

Barbarossa (cardinal red)
Commando (lavender)
D Day (pink)
Deuil Du Roi Albert (bicolor)
Gertrude Britten (red)
Ogden Reid (rose pink)
Golden Eclipse
White Wonder (white)

*These cultivars were found to be listed in 1964 *Vaughan's Gardening Illustrated*, 86th Anniversary Specials, p. 10

6. Dahlia varieties listed from clippings refering to Vaughan's Gardening Illustrated, no year given:

Dahlia Benhur
Dahlia Lois Walcher
Dahlia Exquisite
Dahlia Commando
Dahlia Rose Glory
Dahlia Pink Sutherland
Dahlia Golden Treasure

7. Items found in farm office drawer labeled "Flower Planting":

Seed packet of Sweet William (*Dianthus barbatus*). Single flowered, 'Pink Beauty'. 1-1 1/2' tall.

Seed packet of *Salvia splendens* (Scarlet Sage, Toreador, Scarlet Red) Annual.

Envelope of castor bean seeds (*Ricinus sp.*), labeled "Our own."

Plant identification stakes labeled:

Shirley giant
snaps

Gazania
 Amaranthus
 __?_sophila
 pinks

8. Items found in farm office drawer labeled "Park's Garden":

Marigold Crackerjack seed packet--all colors. Giant Early.
 Plastic and wooden markers labeled:
 "Pink-peach giant"
 "temple"
 "Beets--Detroit, dark, red"
 "Icicle radish/Icicle Rangers"
 "Broccoli"
 "Orange pumpkin"
 "New Zealand spinach"
 "Carrot, long, orange"
 "Bloomsdale Spinach"
 "lima beans"
 "Giant December lavender"
 "Impatiens mixed"
 "Impatiens, dwarf, scarlet"

9. Items found in unmarked farm office drawer:

Seed packets including--
 Hyacinth bean--purple and white, annual, climbs 15'
 lettuce-Oak Leaf
 gourds--mixed varieties, small fruited
 scarlet runner beans--red flowers, 10' climber, annual
 collards--Georgia or Southern
 castor bean (3 packets)--mixed varieties, annual
 tritoma (red hot poker)--perennial
 rutabaga--American Purple Top (1963)
 Delphinium (Hardy Larkspur)--Gold Medal. Choicest mixed. Perennial 3-4'
 Lunaria--Honesty, 2', annual
 Plant markers labeled:
 "Student Prince"

"Deep pink #1 with yellow"

"Lettuce Oak Leaf"

10. Items marked in plant catalogs:

From *Burpee Seeds*, 1962:

snapbeans--Bountiful. (popular broad, flat bean)

polebeans--Kentucky Wonder (rust resistant); Kentucky Wonder Wax.

beets--Crosby's Egyptian (popular early beet); Detroit Dark Red, medium top

radishes--Vick's Scarlet Globe; Long Black Spanish; White Chinese or Celestial. (last two are fall and winter radishes)

From *Peonies, Iris, Daylilies for 1963*, Gilbert H. Wild & Son, Inc. Parts of this catalog were cut out. DAYLILIES marked include:

Arctic North (24") pale cream.

Aurea (28") gold.

Betty Coed (26") pink.

Cartwheels (24") gold.

Cheery Pink (30") azalea pink.

Come Hither (28") peach pink.

Coral Crab (28") coral pink.

Coral Mist (24") shell pink.

Evelyn Claar (20") salmon pink.

Flame Fagot (28") orange red.

Frans Hals (22") orange yellow.

Garden Portrait (28") citrus yellow.

Golden Dewdrop (28") golden yellow.

From *Emlong Nurseries, 1962 Spring Garden Guide*. These plants marked:

Pink Lythrum, perennial, 3'

Pink Coralbell (Heuchera), 2', good cut flower

From *Our 76th Anniversary Selection of Peonies, Iris, and Daylilies for 1961, Flowers from the Wilds of Missouri*, Gilbert H. Wild and Son, Inc. IRIS marked in this catalog include:

Casa Morena (copper-chestnut brown)

Cathedral Bells (pink)

Golden Garland (golden yellow, white fall)

Iridescence (light pink)

Pink Bountiful (orchid pink)
 Pink Cameo (pink)
 Starshine (cream and white)
 Cherie (flamingo pink)
 Ebony Echo (dark red)
 June Bride (apricot pink)
 Solid Gold (gold and bronze)
 Solid Mahogany (red)
 Top Flight (light orange)

From *Park's 1965 Spring Supplement*. Plants marked in this catalog include:

alyssum--Carpet of Snow (2.5' x 10" across, compact)

larkspur--Regal and Supreme mixed (annual, cutting flower) blue, lilac, pink, rose, white, cinnabar

garden phlox--including:

Aida (rose salmon)

Dailysketch (salmon pink)

Dresden China (soft pink)

Lilian (cameo pink)

Sir John Falstaff (large deep salmon pink)

Thunderbolt (fiery red)

White Admiral (white)

baby's breath--Bristol Fairy (double white)

columbine--McKanna's Hybrid (assorted shades)

From *Krider's Glories of the Garden, Spring 1962 Garden Book*. Plants marked in this catalog include:

Floribunda roses--Fashion (coral, suffused with gold)

orange butterfly plant (*Asclepias tuberosa*)--(orange)

blue platycodon (balloon flower)--blue cutting flower

Heuchera (red coralbell)--(coral red flowers)

Campanula carpatica--(indigo blue)

baby's breath--(white)

Liatris--September Glory (blazing star) (pink/purple stalks)

fall blooming asters--The Bishop (blue), Harrington's (pink), Winston Churchill (red), 1-3'.

From *Vaughan's Gardening Illustrated, 84th Anniversary, 1960*. VEGETABLES marked include:

artichoke--Green Globe

asparagus--Mary Washington
bush lima beans--Baby Fordhook
pole lima--King of the Garden
Italian green sprouting broccoli--Calabrese
beets--Perfected Detroit; Winterkeeper
Mangel Wurzel--Mammoth Long Red
celery--Easy Blanching Full Heart; Giant Pascal
celeriac--Large Smooth Prague
cabbage--(standard varieties) Copenhagen Market; Early Jersey Wakefield; Danish Ballhead Short Stem
corn--Hybrid varieties including Golden Cross Bantam and Golden Midget Hybrid. Open pollinated varieties include Bolden Bantam, Blanck Mexican, and Calico, Indian or Squaw (decorative corn)
cantaloupe--Honeydew
watermelons--Dixie Queen; Tom Watson
dandelion--(thick leaf or cabbage variety)
carrots--Touchon
cauliflower--Vaughan's Select Snowball
endive--Broad-leaved Batavian White Escarole (Florida full heart)
lettuce--Leaf varieties including Ruby (bright red, showy) and Oak Leaf. Butterhead varieties including Matchless Lettuce. Crisp head varieties including Imperial. Romaine or Cos varieties including Paris White or Trianon.
parsley--Champion Moss Curled; Plain or Italian
Parsnips--Hollow Crown (long smooth)
kohlrabi--Early Purple Vienna
mustard--Green Wave; Giant Southern (curled long standing)
pumpkins--Small Sugar or Pie
radishes--Early Scarlet Globe Select
winter radishes--Chinese Mammoth or Celestial
spinach--Hybrid Spinach #7 (upright and semi-compact); Bloomsdale long standing; New Zealand Spinach (*Tetragonia expansa*)
swiss chard--Lucullus; Rhubarb Chard
squash--Winter varieties including Blue Hubbard. Summer varieties including Black Zucchini (bush type), Italian Green or Gray Zucchini, Cocozelle (Italian vegetable marrow), Mammoth White Bush, Prolific Straightneck, Giant Yellow Summer Crookneck.
rutabagas--Improved American Purple Top

From 1965 *Park's Flower Book*. Flowers marked include:

zinnias--The California Giants Mixed include:

- Brightness (pink)
 Cherry Queen (cherry rose)
 Daffodil Queen (canary yellow)
 Lavender Queen (rosy-lavender)
 Miss Willmot (soft pink)
 Salmon Queen (salmon scarlet)
 Scarlet Queen (deep scarlet)
 Snow Queen (white)
- St. Fair (orange, lavender, purple, orange, scarlet), 6" flower, 3' tall.
 Fantasy, 3" flower, 3' tall (lavender, orange, rose, gold, white, scarlet)
 Glamour Girls (apricot, orange, rose, salmon pink, yellow, white)
 Brilliant Multicolored, persian carpet (12" mounds)
 Lilliput, 18", (mixed colors)
 Bonanza F1, Zinnia '64--cactus type 30"
 State Fair Zinnia Mixture--various colors, 6" flowers, 3'
 Thumbelina zinnia--6", double and semidouble, various colors
 F1 Hybrid Zinnias--2', 5" flowers
- strawflowers--Cupid's Dart, Catananche, including Coerulea (lavender), bicolor (blue and white) and White cupid's dart.
- asters--Michaelmas Daisies including Novi Belgii New Hybrids (4' tall) and September Ruby (3'), semi-double flowers
- columbine--Glandulosa Vera (dwarf, 3") sky blue
- digitalis (foxglove)--Mertonensis, (3') strawberry
- impatiens--Park's Tangerine (15")
- Gladiolus--Apple Blossom, (white); China Blue; Little Pansy (deep blue); Morning Sun (yellow); Thunderbird (persimmon)
- dahlias--Giant Decorative including The Cardinal (11" flower). Giant Cactus including Blackbird (8" flower).
- Pompon Boquet including Mary Munns (2", lavender) and Yellow Gem (2")
- petunias--Park's Blue Lace (blue) and Park's All Double Blend (giant flowered varieties)
- bellflowers (*Platycodon*)
- forget-me-nots (*Myosotis*)--Alpestris blue and Palustris semperflorens (true marsh forget-me-not, now reclassified as *M. scorpioides*)
- matricaria (feverfew)--annual
- shasta daisy--Little Miss Muffet (12-15")
- delphinium--Connecticut Yankee (purple, dark blue, medium blue, light blue, lilac, lavender)

11. Plants mentioned in publications:

My Connemara, by Paula Steichen:

flower names given to goats (from paths, fields, summer garden) include: bluet, buttercup, primrose, pansy, briarrose, jasmine, dewrose, and poppy

corn

narcissus

holly tree near house

strawberry plants

crested wild iris (near back drive)

columbine (near back drive)

boxwood in vegetable garden

squash, cucumbers, watermelon, gherkins, pumpkins, melons mentioned in Helga's journal

Helga's herb garden included basil, coriander, borage, parsley, sage and thyme (located in spring garden)

honeysuckle and ragweed grew wild in spring garden

zinnias in front of house

pink dogwoods

roses of every color spreading along fence of summer garden

peonies in summer garden

12. Plants found in family photo albums, and/or mentioned by Paula Steichen Polega in adjoining script:

Summer garden:

vines heavy on fences

fence next to pasture covered with climbing roses

filled with foxgloves

white spirea (Margaret's note)

cosmos planted only once (m. n.)

perennial foxgloves

Greenhouse:

annuals only

North foundation of house:

arborvitae

ivy

abelia

spirea

annuals planted west of steps

azaleas

snapdragons in front of azaleas

Front yard:

rose of sharon

flowering quince

marigolds

dahlias

wild roses

hydrangea

Japanese maple

saucer magnolias

"simple single petaled dahlias"

butterfly bush (lilac or pink)

West side garden:

redbud in fork

ginkgo

hydrangea

star magnolia

bamboo

clipped box

box hedge, clipped

trumpet vine on Swedish house fence

southern magnolia

East side excluding lily garden:

arborvitae at edge of lawn

rose bush in center of carriage turn around

pawlonia

Lily garden:

ct. yankee delphiniums, all colors

alyssum

pink petunias

small pink rose bush

dahlias

white lilies

creeping buttercups

orange lilies

South foundation:

- mahonia (oregon grape holly)
- nandina
- rose of sharon shrubs

Garage:

- iris planted at southeast corner (paula suggests blue flag type)
- ferns
- daffodils suggested by Paula (not existing)

Wash house:

- gate covered with ipomea vine
- althea shrubs at each side of kid pen gate
- conifer in north corner between gate and garage
- viburnum ("sweet-smelling")

Spring garden:

- low clipped box
- oak
- forsythia
- flowering quince
- narcissus
- sweetshrub
- daffodils
- large boxwood hedge and individuals
- area generally overgrown except sp. gdn area
- grass, grown tall

Vegetable garden:

- box hedges
- mimosa
- apple tree
- chinese quince
- corn (sometimes both sides of lane)
- oats (and corn for stock animals)
- strawberries on rise above veg. garden (from my connemara)

13. Plants mentioned in 1989 interviews with Paula Steichen Polega:

Summer garden:

- old fashioned plants
- a spring and summer garden

14. Plants mentioned in 1989 interview with Helga Sandburg Crile:

Summer garden:

delphiniums brought by her uncle

Vegetable garden:

peas

beans

berries--dewberries, raspberries

cut flowers (she mentions zinnias)

15. Plants found in red family photo albums, volumes #3 and #4:

South foundation:

helianthus or heliopsis

mimosa

daylilies

dahlias

azalea

Front yard:

hydrangea

abelia

dahlias (pink and red)

marigolds (yellow and orange)

(1961 no flowering shrubs on fence line, including roses)

North foundation:

ivy

spirea

arborvitae

ferns

rhododendron

azalea

East foundation:

cleome

marigolds (yellow and orange, to 5'?)

ipomea

grass

liriope, tall var.

chrysanthemum

abelia

daylilies
foxglove
asters
morning glory
impatiens (pink or salmon)

lily garden:

zinnias
lilies (Blaze)
shasta daisies
yellow chrysanthemums (daisy-type)
impatiens (white)
pink petunias
blue delphiniums
white delphiniums
sweet alyssum
thin garden stakes (possibly bamboo)

East side house beyond lily garden:

remnants of smyth box-lined gdn
variegated box

West garden:

trumpet vine on carport corner
box hedge (now removed)

West foundation:

possibly impatiens (white)

16. Plants found in Archival Photographs at CARL:

Vegetable garden:

Spring garden:

Wash house:

West foundation:

trumpet vine growing on foundation just north of bay window
trumpet vine growing on corner of carport

South foundation:

yellow daylilies (strap type)

South of house:

rhododendron
native azaleas

North foundation:

Front yard:

castor bean plants

marigolds

liriope

dahlias staked

Hepatica americana, pink fl. near arborvitae

West garden:

mock orange

Lily garden:

sultana (impatiens)

cut and come again zinnias

17. From Margaret Sandburg's scrapbook of pressed flowers:

Trailing Arbutus

Periwinkle

Norway cinquefoil

Common blue violet

Bluets

Bird's foot violet

Snowflake

Honesty

Violet

Cinquefoil

Halberd-leaved violet

Strawberry shrub

Robins plantain

Pussy toes

Yellow stargrass

Golden ragwort

Smooth menziesia

Trumpet honeysuckle

Eliot's locust

Dwarf dandelion

Flowering dogwood

Firepink

Epigaea repens

Vinca minor

Potentilla norvegica

Viola papilionacea

Hedysotis coerulea

Viola pedata

Leucojum vernal

Lunaria annua

Viola palmata

Potentilla canadensis var. *simplex*

Viola hastata

Calycanthus floridus

Erigeron pulchellus

Antennaria plantaginifolia

Hypoxis hirsuta

Senecio aureus

Menziesia glabella

Lonicera sempervirens

Robinia eliotii

Krigia virginica

Cornus florida




Silene virginica

Dayflower
Sundrops
Pipsissewa
Scullcap
Tall bluets
Indian pipe
Mimosa
Sweet rocket
American holly
Great mullein
Sensitive briar
Sea pink
Loosestrife
Black-eyed Susan
Self-heal
St. John's wort



Commelina communis
Oenothera glauca
Chimaphila umbellata
Scutellaria pilosa
Houstonia purpurea
Monotropa uniflora
Albizia julibrissin
Hesperis matronalis
Ilex opaca
Verbascum thapsus
Schrankia microphylla
Sabbatia stellaris
Lysimachia terrestris
Rudbeckia hirta
Prunella vulgaris
Hypericum ellipticum (?)

PLANT KEY









TREES

-  BROADLEAF EVERGREEN
 CONIFER
 DECIDUOUS

SHRIPS

-  EVERGREEN
 DECIDUOUS

- | | | |
|-------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------|
|  | MAGNOLIA | <u>MAGNOLIA GRANDIFLORA</u> |
|  | AMERICAN HOLLY | <u>ILEX OPACA</u> |
|  | WHITE PINE | <u>PINUS STROBUS</u> |
|  | EUROPEAN LARCH | <u>LARIX DECIDUA</u> |
|  | COLUMNAR ARBORVITAE | <u>THUJA SP.</u> |
|  | ROUNDED ARBORVITAE | <u>THUJA SP.</u> |
|  | HEMLOCK | <u>TSUGA CANADENSIS</u> |
|  | ELM | <u>ULMUS AMERICANA</u> |
|  | BUCKEYE | <u>AESCULUS OCTANDRA</u> |
|  | YELLOW POPLAR | <u>LIBODENDRON FLUPIFERA</u> |
|  | RED OAK | <u>QUERCUS SP.</u> |
|  | DOGWOOD | <u>CORNUS FLORIDA</u> |
|  | SAUCEUR MAGNOLIA | <u>MAGNOLIA X SOULANGIANA</u> |
|  | STAR MAGNOLIA | <u>MAGNOLIA STELLATA</u> |
|  | PAULONIA | <u>PAULONIA TOMENTOSA</u> |
|  | GINKGO | <u>GINKGO BILOBA</u> |
|  | JAPANESE MAPLE | <u>ACER PALMATUM</u> |
|  | REDBUD | <u>CERCIS CANADENSIS</u> |
|  | PEAR | <u>PYRUS SP.</u> |
|  | WHITE ASH | <u>FRAXINUS AMERICANA</u> |
|  | NANDINA | <u>NANDINA DOMESTICA</u> |
|  | BOXWOOD | <u>BUXUS SEMPERVIRENS</u> |
|  | ROSE | <u>ROSA SP.</u> |
|  | RUGOSA ROSE | <u>ROSA RUGOSA</u> |
|  | ROSEBAY RHODODENDRON | <u>RHODODENDRON MAXIMUM</u> |
|  | KURUME AZALEA | <u>RHODODENDRON OBTUSUM</u> |
|  | ABELIA | <u>ABELIA GRANDIFLORA</u> |
|  | ROSE-OF-SHARON | <u>HIBISCUS SYRIACUS</u> |
|  | PEECEE HYDRANGEA | <u>HYDRANGEA PANICULATA</u>
<u>'GRANDIFLORA'</u> |
|  | BRIDAL WREATH SPIREA | <u>SPIRAEA PRUNIFOLIA</u> |
|  | FORSYTHIA | <u>FORSYTHIA INTERMEDIA</u> |
|  | WEIGELA | <u>WEIGELA FLORIDA</u> |
|  | SMOKE TREE | <u>COTINUS COGKYBIA</u> |
|  | FLOWERING QUINCE | <u>CHAENOMELES SPECIOSA</u> |
|  | JAPANESE QUINCE | <u>CHAENOMELES JAPONICA</u> |
|  | MONEYSUCKLE SHRUB | <u>LONICERA SP.</u> |
|  | PINOTERBLOOM AZALEA | <u>RHODODENDRON</u>
<u>PERICYLIMNODOS</u> |
|  | FLAME AZALEA | <u>RHODODENDRON</u>
<u>CALENDULACEUM</u> |
|  | LILAC | <u>SYRINGA VULGARIS</u> |
|  | JAPANESE SNOWBALL | <u>VIBURNUM PLICATUM</u> |
|  | ANTHONY WATERER SPIREA | <u>SPIREA X BUXALDA 'ANTHONY</u>
<u>WATERER</u> |
|  | BAMBOO | <u>ARUNDINARIA SP.</u> |
|  | TRUMPET VINE | <u>CAMPIS RADICANS</u> |

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|-------------------------------------------------------------------------------------|----------------------|
|  | WOVEN WIRE FENCE |
|  | CHAIN LINK FENCE |
|  | TERRACING |
|  | STONE RETAINING WALL |
|  | BIRD FEEDER |
|  | WATER VALVE |
|  | ASPHALT PAVING |
|  | CRUSHED STONE |

MANAGEMENT RECOMMENDATIONS


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| <p>C. Summer Geranium</p> <p>1. Moisture variety in color. Repeat and repeat seed</p> <p>2. Thin drops from leaves</p> <p>3. Cut back plants</p> | <p>D. Small House—East Side</p> <p><u>Foundation Bed</u></p> <p>1. Fine white foliage. Particularly Moisture to 5-7</p> <p>2. Cut back grass to 2" after 4-6" height</p> <p>3. Repeat summer varieties with dry soil</p> <p>4. Thin shrubbery, always 10</p> <p>5. Plant annuals</p> <p>6. Fine shrubbery, green to 3"</p> | <p>E. Small House—East Side</p> <p><u>Foundation Bed</u></p> <p>1. Inset Plan A</p> <p><u>Leafy Plants</u></p> <p>1. Moisture variety of species, lavender, color</p> <p><u>Yard</u></p> <p>3. Repeat seed in center to center 10-10-10</p> <p>4. Repeat herbaceous</p> <p>5. Cut grass to 2" after 4-6" height</p> <p><u>Acrobasis</u></p> <p>6. Plant shrubbery for covering</p> <p>7. Inset plan to center</p> <p>8. Small House—South Side</p> <p><u>Foundation Bed</u></p> <p>1. Inset Plan A</p> <p><u>Bed Center Bed</u></p> <p>2. 20 hours daily</p> <p>3. Cut grass to 2" after 4-6" height</p> <p>4. Repeat central bed both to soil</p> <p>5. Thin shrubbery and foundation 10</p> <p>6. Small House—South Side</p> <p><u>Foundation Bed</u></p> <p>1. Cut grass to 2" after 4-6" height</p> <p>2. Repeat 10-10-10</p> <p>3. Plant annuals</p> | <p>Microclimate—Green Area</p> <p>4. Repeat herbaceous foliage</p> <p>5. Thin hedge lightly</p> <p>6. Repeat seed 10-10-10 with soil</p> <p>7. Thin central herbaceous lightly</p> <p>8. Fine herbaceous and lavender</p> <p>9. Thin herbaceous and Japanese garden</p> <p>10. Chelidonium—Hemlock Area</p> <p>11. Encourage moss on leaves. Thin periodically</p> <p>12. Cut grass to 2" after 4-6" height</p> <p>13. Moisture variety of herbaceous 2-3 times annually</p> <p>14. Repeat seed of 10-10-10 to give entrance.</p> <p>15. Plant ferns and dry fern to garden</p> <p>16. Repeat 10-10-10</p> <p>17. Thin 10-10-10</p> <p>18. Cut grass to 2" after 4-6" height</p> <p>19. Repeat 10-10-10</p> |
| <p><u>Plant Year</u></p> <p>7. Repeat seed of 10-10-10 (2)</p> <p>8. Plant herbaceous bed. Wind moisture</p> <p>9. Inset Plan C of fence line</p> <p>10. Plant herbaceous, flowering quince</p> <p><u>Climate Data</u></p> <p>11. Add outdoor moisture on rainfall</p> | | | |

NOTES:

NOTES:
DOCUMENTED HISTORIC SPECIES SHOULD BE REPLACED
WITH LIKE-KIND UNLESS OTHERWISE INDICATED
MANAGEMENT TIMELINE DETAILED IN APPENDIX H.

SEE CHAPTER SIX FOR DETAILS OF MANAGEMENT RECOMMENDATIONS



CODE KEY:  AREA
MANAGEMENT RECOMMENDATION

MANAGEMENT RECOMMENDATIONS DETAILED IN APPENDIX N

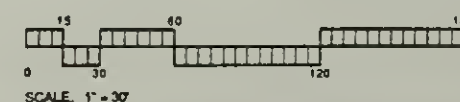


Figure 6.2--Residence Area--Management Recommendations



Fig. 6.11--Rock Outcrop--Management Recommendations



Figure 6.7--Farm Area--Management Recommendations



Fig. 6.8--Lakes and Pastures--Management Recommendations

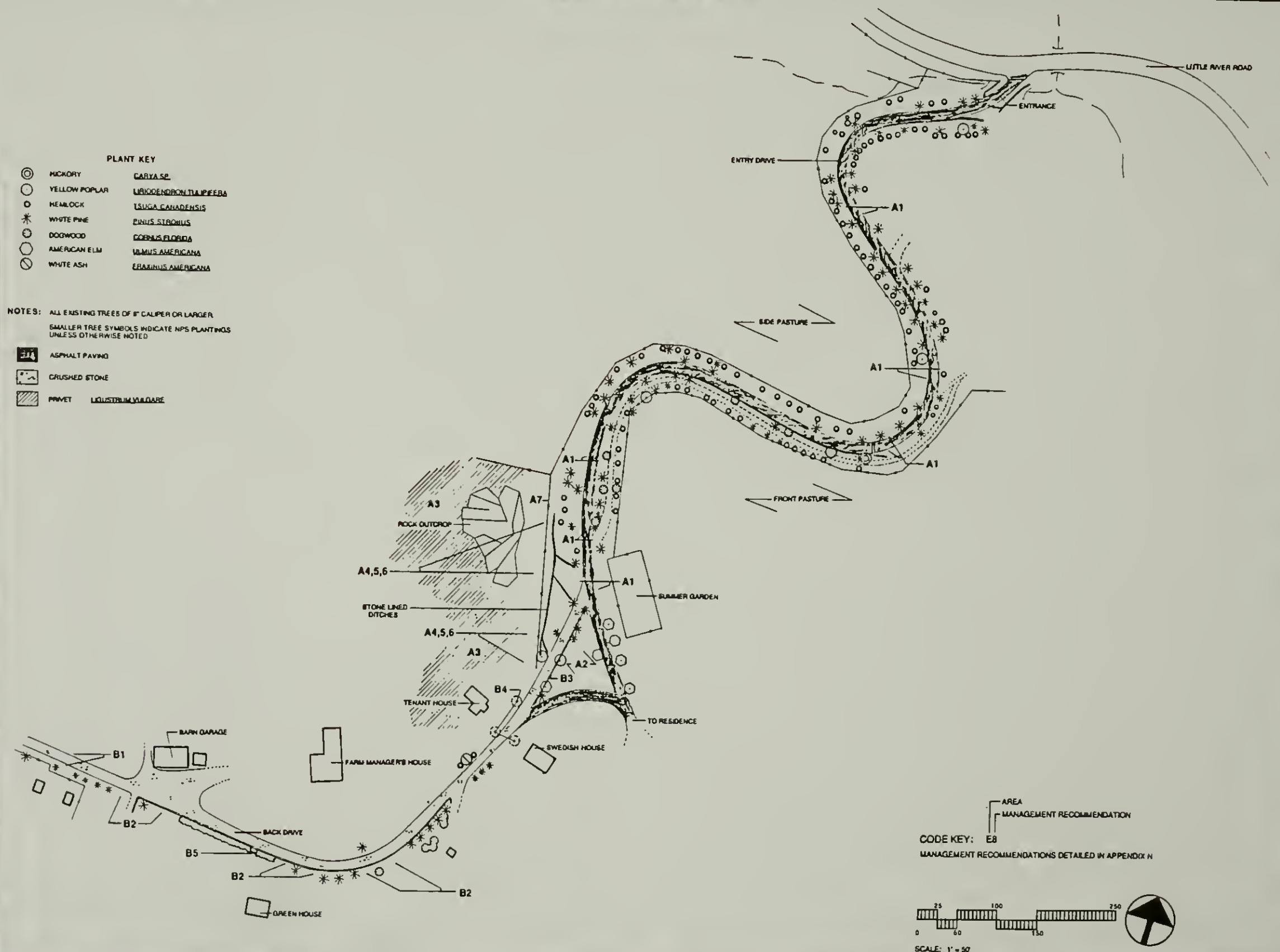


Figure 6.1--Entry Drive and Back Drive to Barn--Management Recommendations



Fig. 6.9--Views, Trails, and Vegetation--Management Recommendations

